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ABSTRACT

Developed for those actively involved with planning the future of two-year postsecondary educational institutions, this publication synthesizes information from the literature with the knowledge and practice in the field regarding the impact of the new adult majority. Chapter I summarizes the issues. Chapter II provides an overview of some of the forces driving institutional change. It discusses external demands for change which center around three key issues--appropriateness, effectiveness, and accountability--as well as internal pressures such as student demands, need to update equipment and faculty, and low student enrollments. Chapter III focuses upon the changing clientele and the changing institutional relationships with the different client groups. Chapter IV evaluates changing institutional goals, governance, structure, and funding. Chapter V provides an analysis of possible changes in the programs and program-related components of the institution. These components are discussed: admissions and assessment, academic module, occupational module, placement, evaluation and outcomes, and auxiliary services. Faculty issues directly affecting institutions are also considered. Chapter VI presents a model and implications for institutional change. Each of six program areas are analyzed by seven program components. Chapter VII summarizes general, client-related, institution-related, and program-related issues and trends. (YLB)

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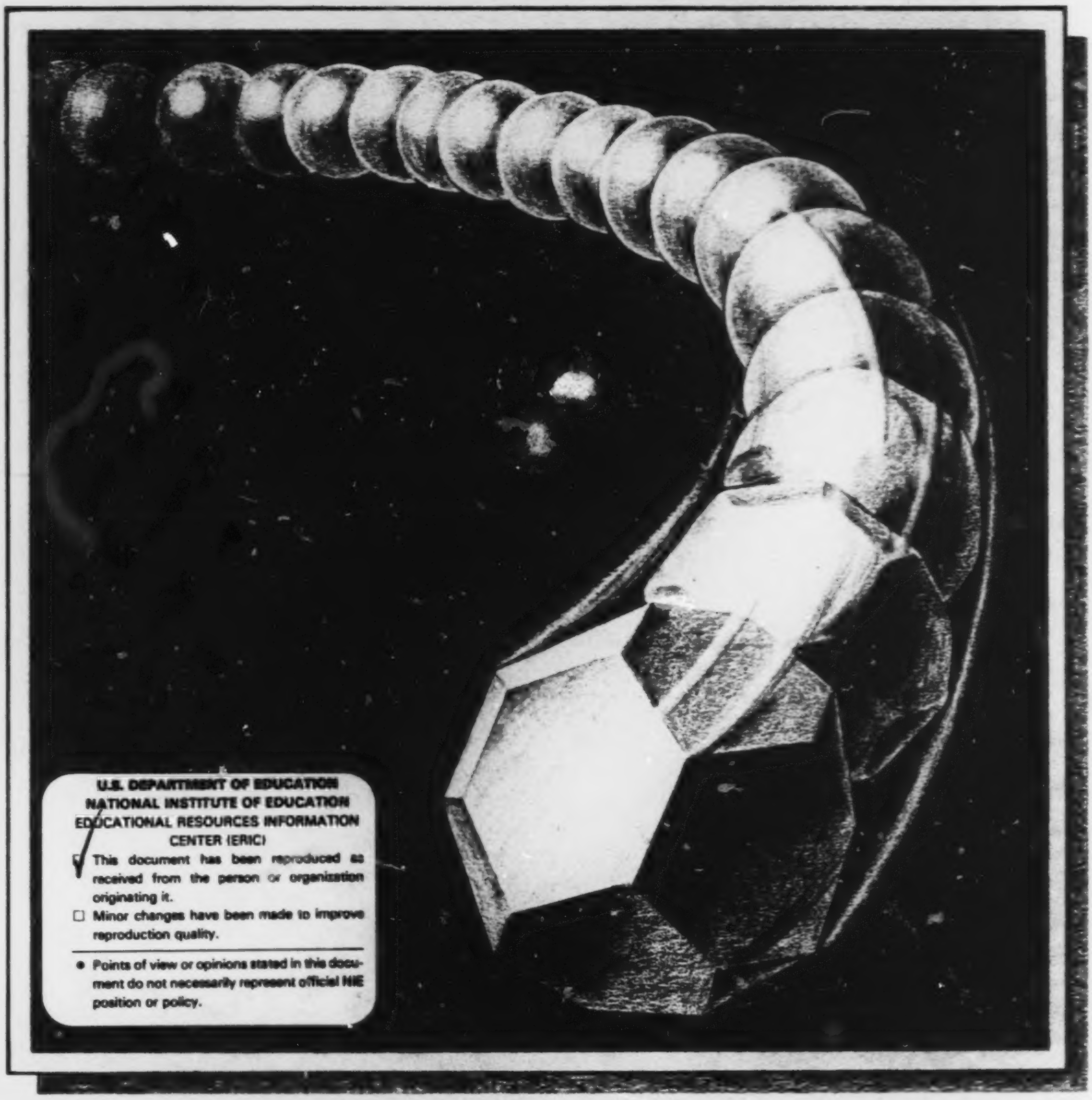

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Redefining The 2-Year Institution

by Billy G. Smith

Special Publication Series No. 51

THE NATIONAL CENTER
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THE ADULT MAJORITY:
REDEFINING THE 2-YEAR INSTITUTION

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CONTENTS

LIST OF TABLES AND FIGURES v

FOREWORD vii

PREFACE ix

EXECUTIVE SUMMARY xi

CHAPTER I. INTRODUCTION 1

  The Reluctant Giant 1
  Study Overview 4

CHAPTER II. FORCES FOR CHANGE 7

  Traditional Model 9
  External Pressures for Change 10
  Internal Pressures for Change 13
  Conditions for Change 14

CHAPTER III. THE CHANGING CLIENT 17

  Individuals as Clients 17
  Organizations as Clients 21
  Governments as Clients 22
  Changing Relationships 23
  Client Organizations and the Institution 25
  The Government and the Institution 27

CHAPTER IV. INSTITUTIONAL CHANGE 29

  Mission 29
  Governance 32
  Structure 34
  Funding 36

CHAPTER V. THE MESSAGE AND THE MESSENGER 39

  Program Parameters 39
  Program Objectives 40
  Program Elements 44
  Faculty 53

CHAPTER VI. IMPLICATIONS FOR INSTITUTIONAL CHANGE 59

CHAPTER VII. SUMMARY OF ISSUES AND TRENDS 67

APPENDIX. EDUCATIONAL LEADERS INTERVIEWED 69

REFERENCES AND RELATED READINGS 75

LIST OF TABLES AND FIGURES

Table

1. ENROLLMENT TRENDS OF OLDER ADULTS 4
2. CHARACTERISTICS OF THE TRADITIONAL TRAINING MODEL 10
3. U.S. POPULATION 18
4. CREDIT ENROLLMENT IN HIGHER EDUCATION BY AGE 19
5. CREDIT ENROLLMENT IN HIGHER EDUCATION 19
6. CREDIT ENROLLMENT IN PUBLIC 2-YEAR INSTITUTIONS BY SEX AND ATTENDANCE STATUS 20
7. CREDIT ENROLLMENT IN PUBLIC NONCOLLEGIATE POSTSECONDARY SCHOOL BY SEX AND ATTENDANCE STATUS 21

Figure

1. The dynamics of change in postsecondary occupational education 8
2. Linear design for career development 41
3. Multidimensional design for a career matrix 43
4. Changing programs in 2-year postsecondary institutions 60

FOREWORD

The ability of this Nation to respond adequately to the rapid shifts in the society and the workplace is increasingly dependent upon the ability of postsecondary institutions to adapt to new environments and new clientele. This is especially true for the public 2-year postsecondary institutions that are charged with a major responsibility of training the craftsworkers, technicians, and other skilled workers that the future economy will so desperately need. These institutions are faced with major changes during the next two decades, and the driving force for many of the changes will be the arrival of a new adult majority.

This publication provides a preview of some of the forces that are impacting these institutions and the changes that may be anticipated. Governing agencies, administrators, and program planners should profit from the findings of the study as they develop plans for the future.

The study was conducted by Dr. Billy G. Smith under the auspices of the Advanced Study Center at the National Center for Research in Vocational Education. Appreciation is expressed for the involvement of key educational leaders listed in the appendix who were most helpful to the author during his site visits. Their collective wisdom provides the basis for most of the observations made in this report. Major contributions were also made by Dr. Dewey A. Adams, Dr. William A. Grusy, Dr. James P. Long, and Dr. Dale Parnell in their critical review of the publication. Their suggestions were most valuable during the development of this final draft. The contribution of Kathy Friend in coordinating the typing and preparation of the report is also gratefully acknowledged. Editorial assistance was provided by Judy Balogh and Janet Kiplinger of the National Center's Editorial Services staff.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

PREFACE

During the preparation of this report, the urge to qualify the findings was often overwhelming. Upon reflection, the concern is valid in that many progressive 2-year institutions have already addressed numerous aspects of the impact of the adult majority, and no one set of circumstances is universally applicable to the vast array of postsecondary institutions. In addition, any attempt to quantify the interface between higher education and postsecondary occupational education often raises quantitative analysis to the level of gross estimation.

Yet, participants in the study repeatedly stressed the need for postsecondary educators to evaluate more effectively the needs of the changing clientele and to be prepared to modify institutional behavior to meet these needs. Even though the institutions are an extremely diverse group, they share a commonality in their concern for an increased understanding of the necessary changes on the part of legislators, governing boards, administrators, faculty, and staff. A frequent remark was, "If we don't change, others will take our place."

The issues presented herein are intended to emphasize the need for change, and to serve as catalysts for further examination of the impact of the adult majority and other existing forces. An extensive discourse involving specific suggestions and solutions would be premature, a fortunate circumstance for the author.

Billy G. Smith

EXECUTIVE SUMMARY

Recent shock waves from this Nation's weakened position in the international marketplace and the continuing efforts to restructure our internal economy have focused attention upon the ability of the public postsecondary education system to train, retrain, upgrade, and update workers. The heart of the system is a loosely structured array of over 1,200 heterogeneous 2-year institutions that are funded and governed in a variety of ways. This loose structure has raised serious questions in the minds of many as the need grows for a more rapid response to change. Can such a diverse system with its existing constituencies be rapidly redirected to respond to changing technology and to new National imperatives? Must alternative delivery systems be expanded? Who can most effectively train America's workers? These are the questions being asked in business and government, and they are the issues that educators in 2-year institutions must face.

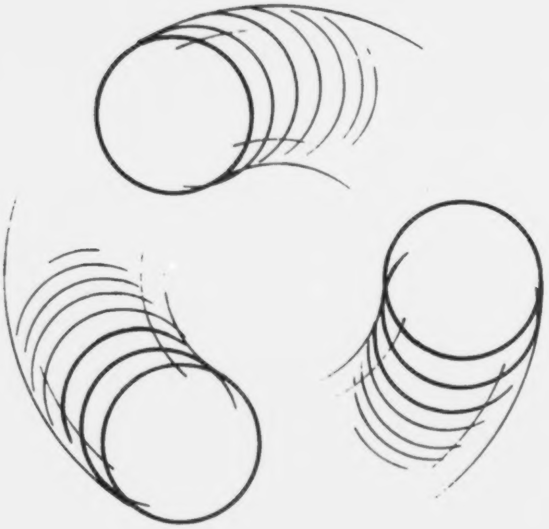
Furthermore, concerns have intensified the ongoing debate regarding the educational mission of postsecondary area vocational schools and community and technical colleges. Do these institutions continue to broaden their programs to include more and more people who need a greater variety of educational assistance, or do they respond to tighter budgets by reducing their programs to narrow areas of occupational specialization and transfer activities? The decreasing number of high school graduates and the diverse needs of the new adult majority do not simplify the decision-making process. Any resolution of these issues requires an improved understanding of the dynamics of some of the current trends and issues that will shape the future of these institutions.

This study addresses these needs through analysis of the literature concerning the evolution of public 2-year institutions as they relate to the future of this Nation's work force, and through extended site visits made to institutions (both public and private), State education agencies, military bases, and business and industry in 18 States. Every attempt was made in these visits to include a broad representation of the extremely diverse types of institutions and State governance systems. The States that were visited included those with highly centralized postsecondary education systems, decentralized systems, dual systems, and single systems.

As the visits progressed, a number of common concerns were identified. Some of these concerns included increased centralization of decision making, inflexible funding formulas, maintenance of state-of-the-art equipment, faculty development (especially part-time faculty), the need for increased cooperative programming with business and industry, and increased regional programming. Yet, in most cases, an overriding concern was that of maintaining and increasing student enrollment. It was generally recognized that this would involve the need to attract an ever-increasing number of older students and to increase sensitivity to organizational training needs. This awareness led to speculation concerning the institutional changes that would be necessary to support the changing student body adequately.

A concentration of efforts, therefore, was placed upon determining the impact of this new clientele—the adult majority—on 2-year postsecondary institutions. The questions that guided the study were: (1) Who are the clientele of the future? (2) How will institutions adapt to serve the changing clientele? and (3) How will other issues affect institutional response in this area? Although the reality of a growing emphasis on occupational training is recognized, every effort was made to bypass the ongoing debate of the relative values of occupational versus general education.

Chapters 1, 6, and 7 are recommended for readers who are primarily concerned with a summary of the issues, the implications for change, and the trends. Chapter 2 provides an overview of some of the forces driving institutional change. Chapter 3 focuses upon the changing clientele and the changing institutional relationships with the different client groups. Chapter 4 evaluates changing institutional goals, governance, structure, and funding. Chapter 5 provides an analysis of possible changes in the programs and program-related components of the institution.



CHAPTER I

INTRODUCTION

The Reluctant Giant

To portray 2-year postsecondary institutions as being in a state of change in the 1980s is the height of redundancy. Few educational organizations have experienced the rapid growth and change experienced by community colleges and postsecondary vocational schools in the past 2 decades. Yet, both practitioners and scholars are now calling for a rethinking of the way that students are to be educated and trained in these institutions (Parnell 1982; Hopkins 1982).

This new charge is issued at a time when 2-year institutions throughout the Nation have reached a level of maturity in organization, staff, and procedures to which strong, stable institutions strive. The pressures of rapid expansion have abated and the frantic search for warm bodies to teach classes has changed to the opportunity to select carefully replacement faculty from an abundant supply of candidates with appropriate credentials.

Therefore, this new "call to arms" is not entirely welcome. It is appropriate to question the character of the change that must now take place. Is it significantly different from the changes taking place in all of higher education? Will it move institutions in directions that vary from those of the past? Are the impending changes just another phase in the evolution of these institutions?

Recent events have placed education in the spotlight. The concern for basic skills at the secondary level has grown into a concern related to effectiveness at all levels. Questions are asked about the relationship of expenditures to outcomes, to quality, and to response time. There is an increased interest in and commitment to improving a system that is perceived to have become bloated and ineffective. Until recently, education has been a small enough and sacred enough enterprise to escape some of the severe criticism that it now must face. Educators maintained that more and more students were arriving; therefore, more and more funds were needed. Funding formulas rewarded growth.

Throughout the sixties and seventies the task was to allocate relatively abundant State and Federal funds to more new programs, more new facilities, and in diverse, new ways. The primary problems centered around adapting programs rapidly enough to obtain earmarked funds. This rush to absorb and allocate funds created an educational conglomerate that is big business. Higher education now involves over 11 million students and 1 million faculty, administrative personnel and staff. Revenues total about $45 billion each year with the Government picking up approximately $33 billion of the bill. During school year 1979-80 the breakdown was $19 billion from States and $14 billion from Federal coffers (Gurson 1980). With increasing size came increasing complexity that in recent years has raised the question of control.

Suddenly, to the surprise of few, it was discovered that the products of the now very expensive educational system were flawed.

One of the most active participants in this growth has been the postsecondary occupational training system. This system includes over 700 community colleges with comprehensive educational offerings, 162 technical institutes, and 500 postsecondary area vocational schools (Bottoms 1982).

Suddenly the baby boom passed, and at the same time our seemingly infallible industrial might was challenged by foreign upstarts, and was severely shaken. Naisbitt (1982) reports that changes in the American economy reflect decreases in productivity, world market share, and domestic market share. The changes include—

1. a drop from a 3 percent annual increase in productivity during the 2 decades after World War II to a 0.4 percent per year decrease between 1973 and 1981;

2. a drop from a 25 percent world market share in 1960 to just over 17 percent in 1979; and

3. a drop from a 95 percent domestic market share in autos, steel, and consumer electronics in 1960 to 79 percent in autos, 86 percent in steel, and less than 50 percent in consumer electronics in the 1980s.

In addition, it is estimated that the United States has fallen from second to seventh place in terms of the pool of skilled workers (Carnevale 1983). First, there was a search for reasons. It was found that business and industry did not reinvest appropriately, and American workers were not as productive as they once were. A search for a scapegoat ensued and education was available and vulnerable.

Suddenly, to the surprise of few, it was discovered that the products of the now very expensive educational system were flawed. Postsecondary institutions along with businesses were spending millions for remediation, and many of the occupational programs had not remained current in content, equipment, or faculty expertise. The small, autonomous, but manageable child had grown into a giant and had become the administrator's nightmare. Institutions became aware that many of their options for change had disappeared with the tenure of the majority of their faculty. Programs and staff developed a life of their own, often independent of the needs of the new clients or the society. Increasing costs required State leaders to begin to question duplication and the increasing competition among these institutions.

Demands for change were issued from various segments of society faced with rapid change and an increasing need for better-trained workers. Business, industry, the military, governmental agencies, and others all expressed and continue to express the need for a reexamination of purpose and approach at all levels. Likewise, a call for change is issued from within. Lynton (1983) makes a very strong argument for change in universities. He argues that the enormous postwar growth necessitates a reexamination of both the pedagogy and reward systems that encourage isolation, and the routine exclusion of priorities and objectives that exist outside the bounds of the internal value system. He further indicates that this reexamination can be expected to help define a new model of "institutions without sharp boundaries either in time, location, or in constituencies" (p. 53). Lynton concludes with a refrain that was often repeated by participants in this study, "But we must undertake these tasks. If we do not, I am convinced that society will develop alternative mechanisms—indeed it has begun to do so" (ibid).

Lynton's concerns about the universities are comparable to those expressed by educators in 2-year institutions. The need for change is recognized, and there is a recognition that replacement could occur if change is not possible. Carnevale (1983), among others, maintains that a new delivery system for occupational training is not the answer, but that the current system must be modified to reward effective and fair training and to discourage ineffective and unfair training. This approach requires an understanding of the consequences of the rapidly changing student body and the impact of the Nation's efforts to restructure its economy.

With this in mind, this study focuses upon the growing adult majority and its anticipated impact upon public 2-year postsecondary institutions. Although adults have been numerous in 2-year institutions, new forces in the society can be expected to make these students a dominant factor in institutional well-being. In some institutions their presence, or absence, will determine institutional survival.

Two societal factors are largely responsible for the change in institutional clientele. These factors are a demographic shift in the Nation's population and a restructuring of the Nation's workplace.

Postsecondary educators, and some secondary educators, are critically examining the bulge in the older adult population profile (created by aging of baby boom individuals) for indications that some relief for decreasing enrollments may be found. Recent statistics indicate that there is a growing trend for adults to return to educational institutions for additional training and retraining.

By 1990 older students can be expected to represent 47 percent of the credit enrollment in all higher education.

The mean age of students enrolled in credit programs in the majority of the 2-year institutions studied was approximately age 27. Projections by Frankel and Gerald (1982) indicate that by 1990 older students can be expected to represent 47 percent of the credit enrollment in all higher education. This trend can be seen when 1979 enrollments for students ages 25-34 and over 35 are compared with 1974 enrollments (see table 1).

The underlying factors in these statistics reflect the impact of women, members of minority groups, and older persons returning to school to seek improved jobs, more fulfilling lives, and better health. Self-investment through education is seen as a route to these goals (Carnegie Council on Policy Studies in Higher Education 1980). This goal orientation will be a significant factor as postsecondary education systems retool to recruit and serve this group of older, often part-time students.

The second factor that will contribute to a change in clientele is the rapid restructuring of the Nation's workplace. Changes in

TABLE 1

ENROLLMENT TRENDS OF OLDER ADULTS
(Percentage of Change between 1974 and 1979)

	Ages 24-34	Ages 35 and over
Total U.S. population	+17.7%	+ 6.6%
In college	+21.5%	+ 6.5%
Full-time	+12.5%	+ 9.1%
Part-time	+26.8%	+43.5%

SOURCE: U.S. Bureau of Census as represented in *The Chronicle of Higher Education* (4 May 1981), p. 3.

technology, international trade, productivity, and the energy supply have all contributed to the transformation of the economy, and have led to (1) the displacement of large numbers of workers and (2) a significant mismatch between worker skills and job skill requirements. In the search for solutions to these problems, 2-year postsecondary institutions are being charged with the responsibility to add upgrading, updating, and retraining to a traditional repertoire that has primarily been dedicated to training for entry-level employment. The new role will primarily involve large numbers of older adults in both credit and noncredit programs of instruction.

Taken together, these two factors (demographic change and the changing workplace) are expected to create an adult majority that will require significantly different delivery systems in comparison to the traditional linear systems described by Cohen and Brawer (1982a). A close examination of the dominant postsecondary educational model reveals that it was designed to serve primarily the needs of the traditional youth majority. Although well-publicized adult education models exist, their use has generally been restricted to noncredit activities and specialized programs in the institution. The anticipated involvement with the adult majority raises the question of what will occur as adult models become the dominant educational design in 2-year institutions of higher education. In addition, how much momentum will this new clientele add to the present trend toward increased occupational training? This study attempts to address some of the concerns created by these issues.

Study Overview

Occupational programs are now dominant in 2-year institutions, and the return of an increasing number of adults is expected to increase that dominance further. There is little question that the growth and major changes in programming will occur largely in occupational and related areas and in the delivery systems. Therefore, in order to examine the impact of the new adult majority, the primary focus was the rapidly increasing number and types of activities in occupational and related areas, and the resulting institutional adaptations. As part of this emphasis, it was also necessary to identify and examine other institutional change factors and their impact upon decisions that relate to the adult majority. A secondary aspect of the study was a review of some of the alternative training models represented by business and industry, the military, and proprietary schools, and an identification of methodologies that may be adaptable to public institutions.

Data collection methods involved a review of the literature related to the changing role of 2-year postsecondary institutions and site visits to numerous locations in 18 States. The literature review involved searches of topics that included adult education, community colleges, change, vocational education, technical education, governance, programs, faculty, and students. The site visits included junior colleges, community colleges, technical colleges, area vocational centers, community colleges that were divisions of universities, community colleges with multiple campuses, small rural institutions, and large urban institutions.

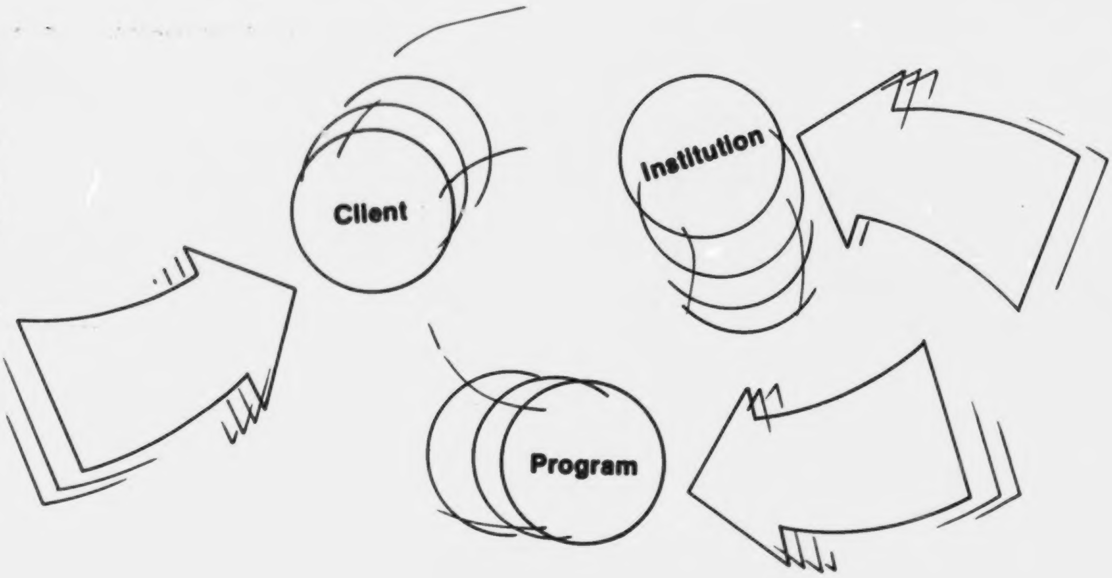
In addition to the visits to public educational institutions, site visits were also made to proprietary schools, business and industry training centers, and military bases in several States. During these visits alternative training models were examined. Perceptions concerning the strength and weaknesses of public postsecondary occupational training were also obtained.

Interviews involved system chancellors and their staffs, deans, school directors, and training officers in industry and the military. The interviews were open-ended and participants were encouraged to identify local, State, and National issues. Those interviewed are identified in the appendix. The results of the study largely reflect the common concerns of those interviewed, with appropriate support from the literature.

This publication was developed for those who are actively involved with planning the future of 2-year postsecondary education institutions. There is no attempt made to enter into the debate of the value of the traditional academic education as compared with job-specific training. The intent is to report merely what the apparent trends are and how they may impact the institutions.

Many of the anticipated changes for the future have been identified in part by institutions scattered throughout the Nation.

Given the extreme diversity of the institutions and their governance structures, there is no attempt to present a recommended model. It was assumed that many of the anticipated changes for the future have been identified in part by institutions scattered throughout the Nation. This publication was designed to synthesize the information from the literature with the knowledge and practice in the field.



CHAPTER II

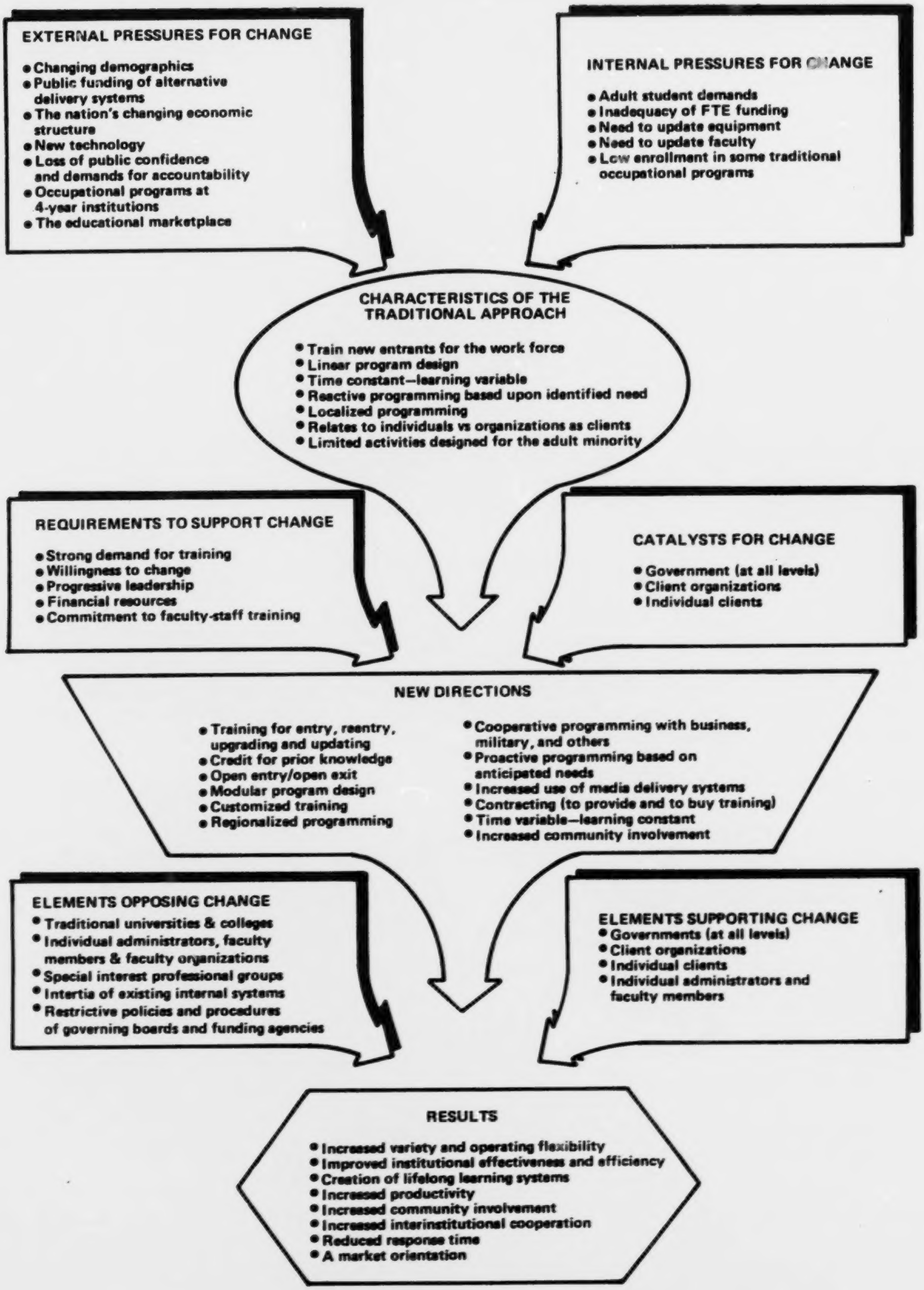
FORCES FOR CHANGE

Although the adult majority and its various manifestations will provide the impetus for many of the changes that will take place in postsecondary occupational education, evaluations must be made in the context of other pressures and counterpressures that also exist in the society. Some of the current pressures and the anticipated changes that may be produced are portrayed in figure 1.

Any discussion of change must begin with an examination of the traditional mission of 2-year postsecondary institutions. It can be argued that there is no traditional mission, nor even a single mission, for these diverse organizations. However, an analysis may be valid if the characteristics of the dominant mission are examined.

Traditionally, the dominant mission for all public education has been to "educate and train our youth." This mission has essentially defined the dominant educational model that permeates the fabric of most postsecondary institutions. Cohen and Brawer (1982a) refer to this as a linear model. It is based upon the assumption that the individual has no prior experience beyond formal high school courses. This assumption has led to the use of a highly prescriptive, sequenced instructional design. The assumption also shapes the service components of the institution and the overall attitudes toward students. It results in little value being placed upon the student's time and convenience. Little or no effort is made to determine a student's prior learning beyond the tests designed to exclude or to place the student in the appropriate remedial program.

This portrayal belies the usual glowing description of unusual responses to nontraditional students. It does not explain the programs conducted in the inner cities, prisons, military bases, or plants. Nor does it address the weekend or night classes and a variety of other significant efforts that have been designed to serve the nontraditional student.



EXTERNAL PRESSURES FOR CHANGE

- Changing demographics
- Public funding of alternative delivery systems
- The nation's changing economic structure
- New technology
- Loss of public confidence and demands for accountability
- Occupational programs at 4-year institutions
- The educational marketplace

INTERNAL PRESSURES FOR CHANGE

- Adult student demands
- Inadequacy of FTE funding
- Need to update equipment
- Need to update faculty
- Low enrollment in some traditional occupational programs

CHARACTERISTICS OF THE TRADITIONAL APPROACH

- Train new entrants for the work force
- Linear program design
- Time constant—learning variable
- Reactive programming based upon identified need
- Localized programming
- Relates to individuals vs organizations as clients
- Limited activities designed for the adult minority

REQUIREMENTS TO SUPPORT CHANGE

- Strong demand for training
- Willingness to change
- Progressive leadership
- Financial resources
- Commitment to faculty-staff training

CATALYSTS FOR CHANGE

- Government (at all levels)
- Client organizations
- Individual clients

NEW DIRECTIONS

- Training for entry, reentry, upgrading and updating
- Credit for prior knowledge
- Open entry/open exit
- Modular program design
- Customized training
- Regionalized programming
- Cooperative programming with business, military, and others
- Proactive programming based on anticipated needs
- Increased use of media delivery systems
- Contracting (to provide and to buy training)
- Time variable—learning constant
- Increased community involvement

ELEMENTS OPPOSING CHANGE

- Traditional universities & colleges
- Individual administrators, faculty members & faculty organizations
- Special interest professional groups
- Intertia of existing internal systems
- Restrictive policies and procedures of governing boards and funding agencies

ELEMENTS SUPPORTING CHANGE

- Governments (at all levels)
- Client organizations
- Individual clients
- Individual administrators and faculty members

RESULTS

- Increased variety and operating flexibility
- Improved institutional effectiveness and efficiency
- Creation of lifelong learning systems
- Increased productivity
- Increased community involvement
- Increased interinstitutional cooperation
- Reduced response time
- A market orientation

Figure 1. The dynamics of change in postsecondary occupational education

Both descriptions of institutional activities are correct. However, if the institutions are examined in their totality, the conclusion must be reached that the linear model remains dominant and that successful efforts to offer new responses to adult needs are largely limited to a specialized component of the institution.

Cohen and Brawer (1982) argue that community colleges have attempted to use old structures in programming, curricula, and support services to respond to the needs of the new clientele. As a result, students are choosing to ignore the prescribed approach to educational success and are utilizing the institution in ways that are not consistent with the linear design. This disregard for educational tradition is described as follows:

> What has happened was that the students were using the institution in one way whereas the institution's modes of functioning suggested another. Catalogues displayed recommended courses, semester by semester, for students planning to major in one or another of a hundred fields. But the students took those courses that fit a preferred time of day or those that seemed potentially useful. (Cohen and Brawer 1982, p. 25)

This nontraditional approach to education by an increasing number of the student body has increased the frustration level of faculty and administrators. McCartan (1983) reports that the dropping in, dropping out, failure to complete prescribed sequences, and small course loads make it nearly impossible for college staff "to advise and counsel, report on, set standards for, and guide students in their learning" (p. 678). Are these difficulties created by the students, or are they the inability of the institution to adapt to a changing student population?

Although the previous discussion has centered around the community college model, other postsecondary vocational educators also rely heavily upon the linear model. Programs are planned and placed in a sequence. The student is then moved through 2 years of the schedule and is assumed to have learned all of the skills that are required (Hopkins 1982). This element of fixed time and variable learning is characteristic of the linear model, and is one of the key issues involved in efforts to modify delivery systems to be more responsive to individual abilities and needs.

"Catalogues displayed recommended courses, semester by semester. . . . But the students took those courses that fit a preferred time of day or those that seemed potentially useful."
—Arthur M. Cohen and Florence B. Brawer

Traditional Model

A closer look at some of the characteristics of the traditional model may clarify some of the needed changes. Table 2 lists and discusses a number of the more obvious characteristics of the traditional educational approach as it applies to occupational training.

As was noted earlier, there are increasing pressures for significant structural changes from both without and within the educational establishment. The characteristics listed in table 2 are representative of some of the key pressure points. Many of the pressures are related to the changing institutional clientele. Others are related to other societal changes, but the impact of both of these upon the 2-year institution will be translated into requirements to make significant changes. A listing of some of the more significant external and internal pressures for change are provided in figure 1, presented earlier.

TABLE 2

CHARACTERISTICS OF THE TRADITIONAL TRAINING MODEL

Characteristics	Comments
1. Training new entrants for the work force	Traditionally, the major source of students has been the high schools, and the training responsibility is to train students for entry-level positions. Updating has been primarily the responsibility of the employing organization.
2. Designing linear programs	The assumption is that the young student has no prior training or work experience. Therefore, the training program design is a sequenced set of activities, each activity preparing the learner for the next, until the most complex has been mastered.
3. Providing degrees/ certificates	Since the young student has no prior training or work experience, some type of certification of his/her worth is needed. The degree/certificate provides a testament to the value of the individual.
4. Reacting to needs	In the past, change in the workplace occurred at a moderate pace as compared to the fast pace of today. As a result, institutions could identify existing needs, change programs, and 2 years later, supply trained workers in time to meet most of the needs of the workplace. A reactive mode is adequate for the task.
5. Localizing programming	Most students in community colleges and area vocational schools are trained for local employers. Therefore, the types and numbers of programs have been planned primarily to satisfy local needs.
6. Providing individual orientation	This is not a reference to the model, but refers to the primary institutional relationship with individuals. Students contracted directly with institutions; there were few intermediaries such as companies and the government.

External Pressures for Change

External demands for change are broad based and are not necessarily independent from one another. They center around three key issues: appropriateness, effectiveness, and accountability. Rapidly changing clientele and technology have raised the issue of appropriateness. A need to respond rapidly to the Nation's massive number of unemployed and displaced workers brings into question the effectiveness of present delivery systems. Also, loss of public confidence has increased demands for additional accountability. These concerns are reflected in the form of specific pressures that are being experienced by postsecondary educators.

The effects of changing demographics have already been partially explored. A more detailed analysis of the changing clientele will be provided in the next chapter.

One of the most significant external pressures for change is the continued funding of alternative delivery systems by the Federal Government. Gilli (1976) identifies two possible reasons for the decisions to bypass the traditional public vocational delivery systems: (1) the entrepreneurial tendencies of some legislators and (2) the attempt to replace the old system because of genuine dissatisfaction with it. Whatever the reason, traditional systems have often provided the justification because they rigidly cling to the role of educating and training youth, while not responding to the increasing needs of adults for training and retraining. As a result, the U.S. Department of Labor, through the Manpower Development and Training Act (MDTA), the Comprehensive Employment and Training Act (CETA), and the Job Training and Placement Act (JTPA), has become a major alternative delivery system. Although the educational community repeatedly challenges the wisdom of this approach, the questions of capability continue to persist, and those outside the educational system are given the responsibility of program management.

Past failures to mount an adequate response to the questions can largely be attributed to two factors. The first factor is the divided leadership representing postsecondary occupational training. The interest of traditional vocational and technical educators is not necessarily consistent with that associated with the 2-year college community. Therefore, no one group or organization can speak for or commit the diverse elements of postsecondary occupational education. This issue is addressed in a 1977 joint study by the American Association of Community and Junior Colleges (AACJC) and the American Vocational Association (AVA) entitled Cooperation in Vocational Education. The two associations have worked well together on numerous National issues involving occupational education; however, entrenched constituencies with divergent views make any relationship between these two organizations rather tenuous. An excellent example is a joint agreement between AACJC and AVA concerning the allocation of additional vocational funds for adult training in community colleges. This agreement was included in the jointly supported proposal introduced by Representative Perkins and others as H.R. 4164, the Vocational Technical Education Act of 1983. In the final bill, special interest groups were subsequently able to override the provisions of the agreement and reduce the allocations to previous levels.

Traditional systems . . . often . . . rigidly cling to the role of educating and training youth, while not responding to the increasing needs of adults for training and retraining.

The second factor is the inherent inertia of the occupational training system. Although many institutions have developed a proficiency at attracting earmarked funds, they have also shown a propensity to isolate the funded activities in order to minimize the impact upon the institution. Some "traditional institutions" have found ways to modify their programs to attract CETA and JTPA contracts. Unfortunately, some of these same institutions then proceeded to recruit many of their already enrolled students into these new programs. The only change was that CETA or JTPA financed the training. Others have taken the opportunity provided by extra Federal funds to update equipment needed for traditional programs. Yet, some of the more progressive institutions have recognized their responsibility to individuals and made significant changes that were eventually incorporated into the structure of the institution.

The impact from the funding of alternative delivery systems of traditional institutions has been mixed. However, changes have taken place, and there appears to be an increasing capability to customize programs and to perform to contract specifications. These two capabilities will become increasingly vital as institutions increase their training activities for business, industry, and Government.

A transformation of the U.S. economy is taking place at an unprecedented rate. Toffler (1981) and Naisbitt (1982) describe the changes that will occur as the United States moves toward an information society. The resulting changes in the structure and technology of producing goods and services are playing havoc with the workplace. Reductions in the work force, plant closings, and movement of industry to areas of cheap labor, such as Mexico and the Far East, have created a pool of dislocated (permanent job elimination) workers that is estimated to range from 1 percent (100,000) of the unemployed to over 20 percent (over 2 million) of the unemployed (Crosslin 1983). These basic structural changes are creating a massive need for retraining, and postsecondary institutions are being asked to respond to this need, often in ways that are not consistent with the traditional educational model.

Basic structural changes are creating a massive need for retraining.

The pressure of new technology has a twofold impact upon education. First, it has outdated many of the traditional programs, of which the impact on drafting by the introduction of computer-assisted design is an excellent example. At the same time, the skills of millions of workers are outdated, and these people must now be retrained or updated in related skills. A growing recognition that the retraining and updating will not be a temporary activity necessitates the development of delivery systems that can provide these services on a continuous basis. This has created a growing debate over the need for a long-term, National human resource development policy. Some of the proposals include a National training fund similar to those in Europe that permit the individual to obtain funds periodically for training or retraining from an account established for this purpose.

In many institutions the pressure from new technology has reversed the program development cycle. In the past, the institution established long-term credit training programs and then provided short-term training using the equipment and instructors for the credit programs. Many institutions are now justifying new programs on the need for short-term retraining/updating for business and industry. After these short-term programs are operational, long-term programs that provide degrees or certificates are begun. This approach provides two benefits that will be critical during the next two decades—flexibility and rapid response.

Although the current debates concerning the ability of the Nation's educational institutions to educate and train people adequately seem to concentrate upon the problems of the primary and secondary schools, the negative perceptions also extend to higher education. Many in business are critical of the problems that they observe in education. Miller (1982) expresses his concern as follows: "I think people in business are used to competition—to changing and innovating and moving ahead—and when they look at education they see a static system, an institution whose basic processes have not really changed in a thousand years" (p. 4). This statement portrays the loss of public confidence in education's ability to adapt to a rapidly changing world. A failure of educators to address the issue will result in further loss of support. The universal concensus among those educators interviewed was that the failure of educators to change will cause the role of education to be assigned to others.

Many people in business are critical of the problems that they observe in education.

The overall effect of education's loss of public confidence is the demand for an increase in accountability. This demand has been amplified by the need for increased public financing. State legislators throughout the country are demanding more information as they carry out their responsibilities of resource allocation. For example, in North Carolina, institutions have been requested to provide individual program costs on a per-student basis. Many JTPA programs must be designed with specific measurable objectives in terms of individual progress and job placement.

Some 4-year senior institutions have evaluated the effect of demographic changes on future enrollments and have concluded that alternative sources of students must be found. As a result, many of these institutions have added 2-year occupationally oriented programs that are in direct competition with programs traditionally conducted at 2-year institutions. In addition, technical developments, such as the improved delivery of quality instruction by institutions at all levels through cable television, make the educational marketplace much more complex.

An overriding source of pressure is the educational marketplace. Higher education has evolved from a handful of institutions dedicated to preparing an exclusive few for the professions, to many institutions dedicated to meeting almost all the educational and training needs of individuals. The mass market is growing increasingly important to most institutions of higher education, and in the next two decades "consumer sovereignty may well prevail" (Carnegie Council on Policy Studies 1980, p. 96). A result of these pressures is an increased emphasis upon an entrepreneurial approach to matching the educational product to the demand.

Internal Pressures for Change

There are a growing number of internal pressures that influence the institution and its operating systems (see figure 1). As with external pressures, they are seldom independent from one another. Most of the internal pressures are created by the increasing mismatch between external expectations and institutional mission. For example, the Ohio vocational education system was originally designed to serve one and one-half adults per every secondary student served. By 1982, the system was serving nearly twice as many adults as high school students in a variety of short-term, long-term, full-time, part-time, and basic skills programs (Ohio Board of Regents and State Board of Education 1983).

Adult students . . . are requesting different services and support systems than those provided to the traditional student.

One of the most significant pressures is coming from adult students who are requesting different services and support systems than those provided to the traditional student. Many times these pressures are passive as adults often do not enroll in institutions unless conditions are conducive to their doing so. For example, the most notable change of this nature was the advent of evening school. As institutions recognized that this service would attract working adults, evening programs were readily implemented. Other significant changes in counseling, scheduling, and instruction are currently taking place.

Traditional funding formulas in most states are currently providing significant pressure. In almost all institutions, the formula is heavily biased toward traditional credit programs, despite the fact that there is an increasing demand for nontraditional activities. Those interviewed indicated that it is becoming increasingly clear that traditional full-time equivalent (FTE) funding formulas must be changed to permit effective response to new educational and training demands. Past failures to modify funding has forced many institutions to take an entrepreneurial stance in the delivery of needed programs, or in some cases, to misrepresent program objectives. The problems with FTE funding have created such activities as (1) a debate as to what populations must be served and (2) an effort by many institutions to broaden their funding base through increased internal income and support from gifts. Both activities can be expected to promote long-term change in these institutions.

Educational institutions have seldom been recognized as a reservoir of state-of-the-art industrial equipment. With the rapid changes in technology, the equipment now used for training is rapidly becoming even more obsolete. Institutions are searching for new solutions to an old problem. Old solutions depend upon the State spasmodically funding new equipment, or the Federal Government offering a program that was sufficiently flexible to provide for the purchase of some "related" equipment. The rapidity of change and the growing cost of the new complex equipment is making this approach unacceptable. No clear-cut long-term solution to the problem has been identified. Attempts to meet current needs have included leasing equipment rather than buying, borrowing, sharing with business and industry, and the use of mobile labs.

Faculty members have not escaped the trend toward obsolescence. Many academically oriented faculty members have found their students disappearing as occupational programs grow. Their academic preparation and commitment to traditional methods often do not enable them to meet new student demands. Although faculty in the occupational areas may have the students, the technology has changed so rapidly that often they are not prepared to teach many of the skills that industry now needs. Institutions are responding to these problems by reevaluating their faculty development programs and employing an increasing number of part-time faculty.

Faculty members have not escaped the trend toward obsolescence.

Even though there has been a significant shift in student interest toward occupational training, not all vocational-technical programs have benefited. Some traditional vocational programs are suffering from low student enrollment. In many cases the programs have not adequately changed to meet current needs. They are often too long, there are no jobs in these areas, or the instructors may not be adequately prepared to meet the needs of adult students.

There are also other factors that impact these programs. In some cases they are victims of the student rush to participate in the "high-tech" future that has been promised. Failure of the program or loss of the power to attract students necessitates change or discontinuation. Unfortunately, past failure to discontinue programs with low student enrollment has led to serious and often valid criticisms of occupational education. The increased pressures for accountability will necessitate the development of systems to discontinue programs in a more timely manner.

Conditions for Change

Change will take place if the pressures *for* are greater than pressures *against* change, and if there are catalysts available to encourage an environment that is supportive of change. Catalysts for change in postsecondary occupational education are identified in figure 1, presented earlier.

The Federal Government chooses to encourage change to help resolve the almost overwhelming problems of the unemployed and dislocated workers. There is also the concern about our competitive position in the world that translates into a Federal concern for better trained and more productive workers. State and local governments are concerned about economic development, and they recognize that education plays a significant role in attracting and keeping industry. Major investments are being made in economic development programs with strong training components. Although the original objective of these programs was to attract new industry, increasingly, resources are being directed toward keeping existing industry in the State or upgrading existing industry.

Clients other than governments are also demanding change. There has been a decided shift in education toward increased support of the business and industry sector. This shift is reflected in the repeated calls for closer ties between the two sectors. Business and industry are faced with a monumental retraining effort, and are encouraging, and in some cases demanding, the increased involvement of postsecondary education.

Individual adult students have also shown that they will participate in programs that are designed to help them solve their problems and that are presented in an efficient and timely manner.

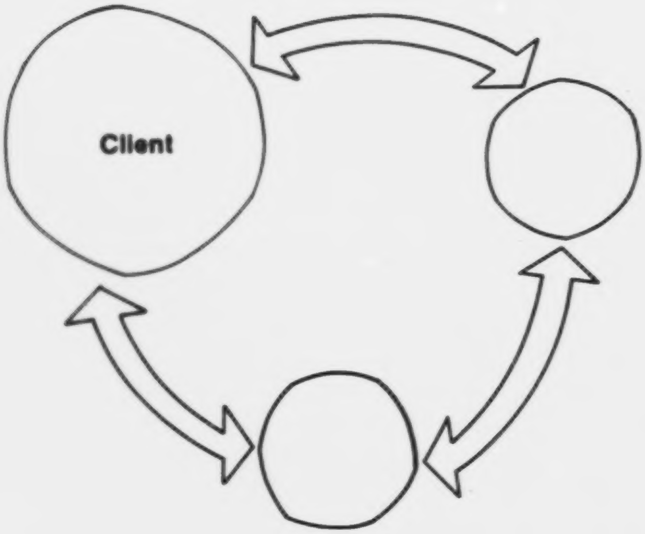
Requirements to support continued change are identified in figure 1. First, there must continue to be a strong demand for nontraditional education and training. Given the dynamic economic environment, this can reasonably be expected. There must also be a willingness to change on the part of the institution and its constituency, an issue that is more complex. Other requirements include progressive leadership, the financial resources, and a commitment to train and retrain faculty and staff.

The traditional isolation of the educational setting has thus far protected many faculty and administrators from the realization that significant changes must take place, or else the vitality or survival of their institutions is in jeopardy. This is evident in the decisions by the institutions that have already been damaged by decreasing enrollment to increase entrance requirements in the name of quality. The concern for quality is laudable, but a review of the mission and its revision may be more pragmatic if survival is desired.

The traditional isolation of the educational setting has thus far protected many faculty and administrators from the realization that significant changes must take place.

A second element that creates some confusion is that the changing demographics are not uniform. In many institutions in the West and Southwest, for example, the education and training of youth may continue to be the primary mission of institutions for some time. However, in the urban areas in these parts of the Nation, there are also significant pressures to provide increased nontraditional education and training programs.

Once the full impact of the demographic changes and their implications are realized by those in the educational community, the demands for change from without and within may be addressed.



CHAPTER III

THE CHANGING CLIENT

The key to anticipating many of the changes that will occur is an improved understanding of the new clientele and the resulting changes in institutional-client relationships. Through the sixties, the student body consisted primarily of youths who had recently left high school and who needed to build a set of skills that would lead to employment or to more advanced education or training. Institutions were often preoccupied with the problems of growth; therefore, the programs and operating systems were more concerned with managing the increasing numbers than maximizing individual capabilities.

In the seventies, as the institutions began to catch up to the demand created by youths leaving high school, adults began returning to school in increasing numbers. Still in somewhat of a growth mode, the institutions largely maintained previous policies and procedures. Returning adults were expected to conform to policies and procedures designed to manage large numbers of recent high school graduates. In some of the more progressive institutions, separate departments were established to deal with adults in a more effective manner. These departments were identified as evening schools, divisions of public service and continuing education, and community programs. They often served two purposes: (1) to provide a more flexible response to the needs of adults and (2) to insulate the traditional program from the need to change.

Individuals as Clients

The traditional client of postsecondary institutions has been the individual (as opposed to organizations, government, or industry). Most individuals have been required to participate in the linear lockstep activities designed with 18-year-olds in mind. The changing age, character, and needs of the individual client are forcing institutional change. There has been extensive documentation concerning the demographic changes in

The changing age, character, and needs of the individual client are forcing institutional change.

the Nation, and most educators have been adequately exposed to the details. The statistics used in this document will be limited to brief summaries of the information available.

Although there are relatively accurate estimates of composite enrollments in higher education, non-duplicated estimates for the various categories of enrollment in all public 2-year postsecondary education are less precise. There are relatively accurate estimates for individual categories such as community college students, area vocational school students, adult students, full-time credit students, part-time credit students, and noncredit students. However, because these categories are not discrete, enumeration of various categories of students in 2-year institutions is difficult. This leads to a discussion in which gross estimates must suffice.

Tables 3 through 7 are summaries of information provided by the National Center for Education Statistics (1982). Table 3 provides estimates of the U.S. population in five age groups. It is noteworthy that the numbers of individuals in the 18- to 24-year range will decrease by about 15 percent, while those in the 25- to 34-year range and the 35- to 44-year range will increase 14 percent and 40 percent respectively. Table 4 provides a summary of credit enrollments in higher education by age. It reflects the anticipated decline in the numbers of students between 18 and 24 years of age and the increase in the numbers of students 25 and older.

Table 5 provides estimates for credit enrollment in higher education in all institutions (2- and 4-year) and in all 2-year institutions. The enrollment in 2-year institutions as compared with that of all institutions is expected to grow from approximately 27 percent in 1970 to 41 percent in 1990, and it is anticipated that the growth will be biased toward older students. Table 6 provides an analysis of the credit enrollment in public 2-year institutions by sex and attendance status. The significant changes are reflected in the increasing number of women and part-time students.

TABLE 3

U.S. POPULATION
(millions)

Ages	1970-71	1980-81	1990-91 (projected)
5-13 years	36.6	30.2	32.6
14-17 years	15.9	15.8	12.8
18-24 years	24.7	29.5	25.1
25-34 years	25.3	36.2	41.1
35-44 years	23.1	25.7	36.6

SOURCE: National Center for Education Statistics (1982, p. 3).

TABLE 4

CREDIT ENROLLMENT IN HIGHER EDUCATION BY AGE
(millions)

	1970	1980	1990 (projected)*
Total	8.6	12.1	12.1
16-17 years	.3	.2	.2
18-19 years	2.6	2.9	2.4
20-21 years	1.9	2.4	2.0
22-24 years	1.5	2.0	1.9
25-29 years	1.1	1.9	2.1
30-34 years	.5	1.2	1.5
35-over	.8	1.4	2.1

SOURCE: National Center for Education Statistics (1982, p. 36).

NOTE: Details may not add to totals because of rounding.

*Based upon "intermediate projections."

TABLE 5

CREDIT ENROLLMENT IN HIGHER EDUCATION
(millions)

	1970-71	1980-81	1990-91 (projected)
Total—all institutions	8.6	12.1	12.1
2-year institutions	2.2	4.5	5.0

SOURCE: National Center for Education Statistics (1982, p. 3).

TABLE 6

CREDIT ENROLLMENT IN PUBLIC 2-YEAR INSTITUTIONS BY SEX AND ATTENDANCE STATUS
(millions)

Year	Total Enrollment	Sex		Attendance Status	
		Men	Women	Full-time	Part-time
1970	2.1	1.3	.8	1.1	1.0
1980	4.3	2.0	2.3	1.6	2.7
1990 (projected)*	4.5	1.9	2.6	1.4	3.1

SOURCE: National Center for Education Statistics (1982, p. 44).

*Based on "intermediate projections."

No comparable estimates were readily available for noncollegiate 2-year postsecondary schools. Table 7 provides 1978 estimates of credit enrollment in these institutions. It would be expected that these schools participated in the overall growth that took place until 1980.

The estimates just given involved credit students only. Moon (1980) combined several sources to estimate enrollments in colleges and universities in three categories: full-time credit enrollment, part-time credit enrollment, and part-time noncredit enrollment. He reported that there were 7 million full-time degree credit students, 5 million part-time degree credit students, and 10 million part-time noncredit students. Unfortunately, the credit and noncredit students in postsecondary area vocational schools were not included. However, these gross estimates portray the change from the historical conditions of the enrollment of primarily full-time students. Of the 22 million students reported, 15 million were enrolled part-time for credit and noncredit activities. Most of them were older adults. Moon projects that by the year 2000 from 75 percent to 80 percent of the people involved in postsecondary education will be part-time noncredit students.

There is general agreement that the individuals attending 2-year postsecondary institutions will be older and will increasingly be attending on a part-time basis. The concerns that persist at the institutional level are, (1) Will adults return in sufficient numbers to offset the loss in full-time enrollment created by decreasing numbers of youth leaving high school? and (2) What do adults need and want?

Gilbert (1980) indicated that over the next 10 years 40 million of these older students can be expected to seek assistance from community colleges. Their interests will be primarily job and career related, and they will be working and attending college on a part-time basis. Diplomas or degrees will not be a priority for these clients, although in many cases they will choose credit courses. He further indicates that the courses are expected to fall in the areas of business, health professions, social sciences, education, engineering, and fine arts (in that order).

Four priorities of these individual students have been identified by Moon (1980). They will look for greater diversity of learning opportunities, recognition of their prior learning experience, different kinds of ways to learn, and different kinds of people to teach them.

Organizations as Clients

Although 2-year educational institutions have traditionally supported training for organizations, the loss of significant numbers of traditional students and the rapid changes in the structure of the workplace have placed an increasing emphasis on programs to serve these clients. Grede (1981) accurately captured the shift in his remark, "The community college has narrowed its role as handmaiden to the senior colleges and universities and enlarged its role as handmaiden to business, industrial, public agency, labor, and military communities" (p. 1). However, this shift is not only created by the needs of institutions. Business, industry, and other organizations are suddenly faced with dramatic changes in the labor supply and in an existing work force that must utilize new, complex equipment and procedures. Therefore, in addition to significantly expanding internal training efforts, they are also increasingly turning to public education institutions for assistance.

> ***"The community college has narrowed its role as handmaiden to the senior colleges and universities. . . ."***
> ***—John F. Grede***

As activities for business and industry and other such clients increase, they can be expected to have an impact on institutions' policies and procedures. No longer will the institution relate to a single individual with limited economic power and limited input as to what he or she wants from the educational experience. As economic powers in the community, as representatives of large numbers of potential students, and as entities with specific expectations regarding desired outcomes, organizations require responses that differ significantly from those directed toward individual students. These clients, for example, do not tolerate complex registration procedures, and often do not accept the premise that their employees must spend valuable time to be processed through inefficient admission and registration systems.

TABLE 7

CREDIT ENROLLMENT IN PUBLIC NONCOLLEGIATE POSTSECONDARY SCHOOL BY SEX AND ATTENDANCE STATUS (millions)

Year	Total Enrollment	Sex		Attendance Status	
		Men	Women	Full-time	Part-time
1978	.45	.24	.21	.29	.16

SOURCE: National Center for Education Statistics (1978, p. 40).

In addition to being impatient with real inefficiencies, these clients are often impatient with procedural inefficiencies that may result from valid educational objectives. Therefore, there must be a continuing effort to explain the parameters involved in any joint effort to the satisfaction of the client organization.

Organizations as clients also differ from individuals as clients in other ways. Traditionally, the individual who approached an educational institution had a relatively clear perception of the benefits related to a degree or certificate, resulting from education or training. Institutional staff assumed that everyone knew the institution was the best source of educational/training activities. When this assumption is applied to organizations, there are serious problems related to perceptions. A recent study of attitudes of business and industry by Wilms (1984) reveals the discrepencies. Almost half (49 percent) of the employers studied indicated that they had no preference as to whether or not applicants for nonprofessional positions had vocational or academic training. Only 34 percent preferred some academic exposure and 17 percent preferred vocational education backgrounds. Over two-thirds of the employers indicated that they provided most of the entry-level training for their jobs. If public education is to serve these clients, it must be able to delineate clearly the benefits. Selling the benefits of public education is particularly difficult when many firms must conduct programs in basic skills to prepare their employees for entry-level training.

Governments as Clients

As is the case with business and industry, work with all levels of government for the training of employees is not a new activity for community colleges. In addition, the Federal Government has funded the training of large numbers of individuals through various student aid categories: MDTA, CETA, and now JTPA. In the past, students aided by these funding sources provided an effective hedge in a period of volatile enrollments. The prospect of a long-term decrease in enrollment of traditional students makes this funding source for students more important than it has ever been. At the same time, high unemployment and the increasing number of workers who are permanently displaced from their jobs make postsecondary occupational training a priority item in governmental plans.

Government funding of education through the support of the individual (through direct grants and loans) leaves traditional institutional-client relationships largely in place, if the impact of increased reporting and adherence to guidelines that may not be applicable to the educational process is ignored. However, government funding of specific programs (e.g., JTPA and so forth) redirects the provider-client relationship from the individual to the governmental organization that controls the purse strings. As with the business and industry relationship, the traditional autonomy of the institution is decreased to the extent that institutional behavior and program outcomes are often prescribed by the managing agency. Of course it can be argued that the institution is free to accept or reject governmental programs, but survival is a strong motivation for both administrators and individual faculty members.

An obvious, but significant, additional observation is that the Government as a client must be satisfied with the results of training programs, or funds may be redirected. One argument for the selection of the MDTA, CETA, and JTPA funding channels was that the traditional educational/training establishment was not responsive to the needs of government and the country. In many instances, the educational/training establishment continues to perform much of the actual training, but under the guidance and control of intermediaries.

In summary, the new clientele is a mixture of individual students who will have increased power to influence the policies, procedures, and programs of the institutions as well as organizations and governments that are increasingly prescriptive in their requirements for education and training. Institutions and their constituents must be aware of the significance of this new client mix. For example, the methods of attracting these clients are notably different from the traditional "we are here when you need us" approach of the past. A second and more important reason is that in some cases the power of these clients may lead to the abdication of the professional responsibilities of educators to define the optimum conditions for learning and to maintain the quality of the product.

The new clientele is a mixture of individual students . . . as well as organizations and governments.

As never before, educators must understand that schools are service organizations designed to produce change in people. The client group as the prime beneficiary (individuals, business, military, government, and so on) of any service organization is crucial in establishing the organization's goals and authority. The task of the institution is to serve the collective interest of the client group, and at the same time retain its authority and not become subservient to the demands of the group (Giacquinta 1973). During the next 2 decades, professionals in 2-year postsecondary institutions will be challenged continually to balance the needs of the individual against the needs of the organization.

Changing Relationships

The impact of the new client mix is evident in the changing relationships that are developing between the institutions and the various categories of clients. These relationships will determine the shape and substance of institutions in the future.

The institution's relationship with external groups determines how the institution is perceived by the community. This perception determines how and to what extent the community uses the institution, and the extent to which the institution is allowed to meet the needs of the community. Independent of its mission statement, the institution is limited to being what the community thinks it is (Gollattscheck 1984).

The Individual and the Institution

> The citizen-student of the future will view community college education as a marketplace item that is available on a demand basis necessary to fulfill personal and vocational goals. The price and the quality must be right. (Gannon 1983, p. 41)

The shift from a seller's to a buyer's market in the educational arena has created confusion concerning the new relationships that are being created. Faculty who traditionally reserved all rights of assessment, prescription, treatment, and evaluation are being asked to share the responsibilities, and in some cases, are facing prescribed behavior. Students are just now beginning to recognize that they have multiple options, and that with options comes increased power to influence the institution.

Individuals now have the ability to influence the character of their education. This development is consistent with Toffler's (1981) concept of "de-massifying" elements of society to provide more individualized responses to specific needs. Customized training programs are now available to business and industry. Can similar programs based upon individual needs be far behind?

Many older adults continue to be intimidated by traditional delivery systems, and they see their major objective as one of "fitting in" with the routine of the institution. Even the massive infusion of veterans at various periods in the past had limited impact on these systems. This is primarily due to the long tradition supporting the concept that educators know best. Older adults are particularly amenable to this concept because of their early conditioning. Returning students from the college campuses of the 1960s may provide an exception.

Two factors are beginning to change the perceptions of many adult students. The first is the current debate about the quality of education and the abilities of educators. Valid questions have been raised that are supported by numerous examples of ineffectiveness. The second factor is the increasing activity of educational institutions in the educational marketplace. Advertisements that describe nontraditional programs, registrations, scheduling, and teaching systems are informing adults contemplating education or training about acceptable alternatives to the traditional models. As these adults observe institutions rushing to modify "absolute" rules to attract training dollars from business and industry, they begin to realize that change is possible, and they exert their power to shape educational policies and procedures to better fit their own needs. Postsecondary education has become a marketplace and the individual can no longer be expected to return to the role of a passive participant in the process.

Postsecondary education has become a marketplace and the individual can no longer be expected to return to the role of a passive participant.

Many of the factors involved in the provision of services to part-time students were examined in a study by Kegel (1977). He found that although over 85 percent of the institutions studied actively recruited part-time students, the students were not given much attention or service. Special orientation programs were provided by less than 20 percent of the institutions; only 15.3 percent provided telephone registration; only 7 percent provided counselors who only served part-time students; one out of four institutions had no counseling either day or night; and little child care was provided. Yet, two-thirds of the institutions charged part-time students activity fees, even though they were excluded from full participation in intercollegiate athletics.

Increasing pressures to improve institutional attention to the interests and the needs of the individual student have engendered a variety of institutional responses that range from fear and rejection to a recognition that change can assure badly needed FTE students. The language of fear and rejection emphasizes the concerns for control, standards, quality, and financial limitations. The language of acceptance emphasizes opportunity, challenge, flexibility, and the need to obtain new sources of funding to carry out the new responsibilities. Progressive institutions emphasize the latter without losing sight of the former.

Almost all of the administrators interviewed for this study anticipated the need to recruit and support adult students. However, they often reported that due to limitations related to finances, governance, or employee resistance to change, new initiatives would come slowly. In the areas that are the most resistant to change, there are evidences that new relationships will either be legislated or that the needs of adults are being addressed by marginal institutions. The result in both cases is often a quality of education/training that is inferior to the level that is possible through a genuine commitment from capable institutions.

In those cases where the institution has willingly responded to a new institutional-client relationship, dramatic advances in the educational process have taken place. The excellent television courses developed by Miami-Dade Community College and others, and the efficient telephone registration system implemented by Tulsa Community College and others, are outstanding examples of attempts to adapt to the need for alternative educational systems and procedures. The development of successful "colleges without walls" has also necessitated the creation of new and innovative institutional-client relationships.

Positive examples of the changing relationships between institutions and individuals abound. However, in many institutions the positive changes still occur in isolated areas. It is imperative that governing bodies, administration, and faculty begin consistent study of the evolving relationships with individual students in light of their impact upon the entire institution.

Client Organizations and the Institution

Client organizations present both different problems and opportunities for institutions when compared to the individual-institutional relationships. The problems generally relate to the relative power of the client organization and its ability to use that power to affect both the operations of the educational institution and the institution's environment. The opportunities presented by the organizational-institutional relationship are the potential new resources and other means of support that are available through client organizations.

These are not new observations, but they have become significantly more important in light of recent trends. Timpane (1984) indicates that "of all the recent changes in [the] landscape of American education, none has been more dramatic than the reappearance of the business sector" (p. 389). He goes on to say that National panels and State commissions on education are regularly including business executives in their deliberations, and that conventions of educators are featuring activities to encourage new partnerships between business and education. Leaders of business and other organizations have begun to recognize that solutions to the problems of the future are closely related to the Nation's capacity to educate and train effectively.

As educational institutions enter into these new partnerships, they must be prepared to address both the problems and the opportunities that are created. This dilemma can best be examined in two parts: (1) the organization as a client and (2) the organization as a benefactor.

One maxim must be accepted in the examination of the organization as a client relationship. The organization has its own agenda, and education and training are merely services or products that it purchases. This is a significantly different perspective than that of the traditional student who had an agenda that was compatible with the intent of the institution. Given this, the purchase of educational/training services by an organization has two significant components. First, the organization has an established pattern for making purchases. Second, the organization has alternatives.

Institutions that have successfully recruited business, industry, and other organizations have discovered that the "sale" is made by . . . offering to help solve specific problems.

Institutions that have successfully recruited business, industry, and other organizations have discovered that the "sale" is made by going to the organization and offering to help solve specific problems. This is consistent with the way organizations are sold virtually all of their products and services. However, this method is contrary to the traditional educational position that "everyone should know" the value of what is available at the institution and should therefore come seeking the benefits that are readily available in prepackaged courses. The "we are here if you need us" attitude will not be successful for those institutions that wish to build strong industrial-based programs in the next two decades.

The second and equally important component that must be recognized is that client organizations have alternatives. Gannon (1983) estimates that approximately $60 billion a year is invested by business, industry, and other agencies to train employees in programs that are not conducted by colleges or universities. This confirms that organizations not only have alternatives but also use those alternatives extensively. Therefore, educational institutions must recognize that their presentations must be clear and specific and must convince those in the organization that the education or training provided will be more efficient and effective than that provided through other means. Again, these requirements are counter to many of the traditional operating parameters in educational institutions.

Institutions that have not addressed these issues have found that they have been subsequently frozen out of lucrative contracts. Many "traditional" institutions near military bases belatedly have discovered that the military is willing to exercise its options by bringing in out-of-state institutions to provide education and training that nearby institutions would not or could not provide. Many of these "traditional" institutions have now modified their positions and once again are actively competing for the opportunity to provide the services.

Once a client relationship has been established with an organization, there are other factors that must be considered. As a supplier, the institution must complete the contract to the satisfaction of the client organization, or future contracts are lost. This differs from the traditional educational practice in which it is hoped that the strong instructors will make up for the performance of the weak ones. Therefore, the institution must have the flexibility and freedom of operation to fulfill the contract satisfactorily. The danger inherent in this relationship is that the educators or trainers may be pressured to abdicate their professional responsibilities of deciding the optimum learning environment and the most effective design of the learning package. In addition, there is a professional responsibility to the individual to be trained that must be balanced against the desires of the client organization.

Too often, institutional leaders are unaware of the "pitfalls" as they enter into training contracts with client organizations. To serve the rapidly increasing demand of organizations for training, it will be necessary for institutions and their governing agencies to review the structure and operation of the entire institution. Policies, procedures, and staff who have satisfactorily provided services to individual clients in the past may be inadequate to meet the needs and demands of organizations in the future. For example, contract management can be expected to become a significant new skill. It may no longer be possible, or desirable, to limit the organizational-institutional relationship to a division of continuing education, or a comparable unit.

The profit organization as a benefactor to nonprofit educational institutions presents a different set of circumstances. There is currently considerable optimism in occupational education that business and industry will become a viable source for new funding, and there are indications that the concept has merit. The computer industry has made a significant investment in education by giving institutions large amounts of equipment. Other industries have done likewise. In addition, business has displayed a growing interest in becoming actively involved in improving the overall quality of education.

Results of a 1982 survey sent to 2,000 members of the National Association of Manufacturers by Nunez and Russell (1982) indicate that industry is willing to participate in cooperative activities to make vocational education more effective. Although it is evident that there is a willingness to support education, it is also evident that the bias is toward providing assistance within industry's own context. The reluctance to release employees to teach or to permit the use of company equipment is significant in that many of the recent proposed solutions aimed at keeping the programs of institutions up-to-date include both of these options.

Organizational contributions of money and equipment are usually made for one of two reasons. The first is a motive to improve the overall quality of life in the community by helping to improve the institution. This motive relates to the institutional development function in most institutions. The second motive is the desire to encourage the institution to respond more effectively to the specific needs of the company or industry. This publication is more concerned with the latter motive.

In order to attract significant gifts of equipment, program funds, and personal assistance, the institution must more effectively involve representatives from outside organizations in the life of the institution. Most of those interviewed during this study indicated that institutions have traditionally provided limited opportunities for involvement, and, as a result, there has been minimal participation by representatives from outside organizations. Most institutions that have attracted significant contributions for improved occupational instruction have involved outside organizations in needs identification, program design, and even program evaluation. This approach requires a modification of some of the closely held prerogatives that are traditional in education. It requires a new openness and willingness to accept criticism.

Models for effective organizational-institutional relationships exist in several States. North Carolina (1957) and South Carolina (1961) were among the first to initiate statewide postsecondary skill training in support of business and industry. Since that time many other States have instituted efforts toward similar objectives. Georgia's "quick-start" and Oklahoma's "special training programs" are representative of the expansion. Business, industry, and other organizations are heavily involved in and committed to these efforts (Stevens 1983).

The Government and the Institution

As is the case with organizations, governments (Federal, State, and local) can be both clients and benefactors. The benefactor relationship, in terms of basic funding and other support activities, is long-standing and generally well understood. (Changes in basic funding are discussed in chapter 4.) The emphasis in this chapter will be placed upon the government-institutional client relationship.

As clients, governments purchase various catagories of education and training from institutions. These include training for governmental staff, training for economic development, and training for various publics to resolve or improve such societial problems as unemployment, poor health services, and so forth.

The government-institutional relationship is similar in many ways to the organizational-institutional relationship. When governments contract for the training of their own employees, they are effectively relating to the institutions in the same ways as that described for organizations. A notable exception is that a government entity often does not have the resources for staff training that are usually available in business and industry. The educational marketing approach is similar to that directed toward business and industry in that successful institutions are proactive rather than reactive.

Government often presents a different set of circumstances and a larger pocketbook than business or industry clients seeking employee training.

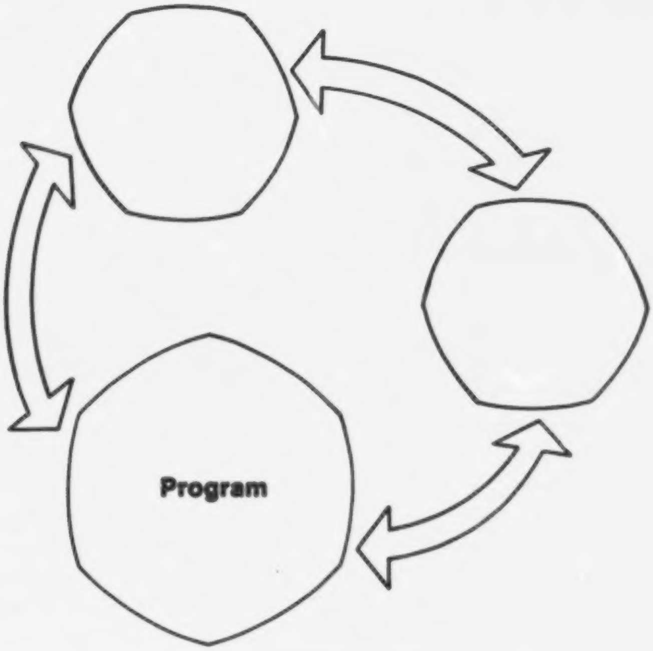
As a representative of various publics that need education and training services, the government often presents a different set of circumstances and a larger pocketbook than business or industry clients seeking employee training. Some of the areas for which governments sponsor training for groups (other than government employees) include training for the unemployed, the displaced worker, new and expanding industry, and those needing instruction in basic academic skills. Although the government-institutional relationship in these areas has existed for some time, the changing structure of the workplace is expected to increase the need for government-sponsored training. The growing competition for training from sources outside the traditional education community, and the increasing need to involve more elements of the institution, necessitate a broader institutional understanding of the implications of the relationship.

The necessity for the involvement of government in specific training activities is clear when broad societal problems are analyzed. There are 65 million adults who lack basic competency skills (Gilbert 1980), and up to 20 percent of the unemployed (2.1 million) have been permanently displaced from the work force because of job elimination (Crosslin 1983). A related problem is the future training needs of the growing number of illegal migrants from Mexico in this country. The number is currently estimated to be between 1.5 million and 4 million ("Estimating Illegals" 1983). These problems are not totally independent from one another, for as society becomes more complex, basic skills become more complex and the need for skill education increases.

Efforts to address the basic skills problems are funded through traditional educational channels. As was previously indicated, attempts to address the training of unemployed and dislocated workers have primarily been funded through channels other than education. This has led to a differentiated set of government-institutional relationships.

Government sponsorship of specific training programs generally has a broader focus than training sponsored by other organizations. Therefore, the institution has greater responsibility and freedom in determining program parameters. Generally the government, or its representatives, welcomes institutional participation in needs identification and program definition. In many ways this approach is closer to the traditional institutional-client relationship. Yet the better government programs often have well-defined performance standards, such as targets for the number employed and the number certified. Institutions competing for these types of programs must be prepared to address the standards. Too often traditional institutions define and design programs to be compatible with existing offerings, rather than addressing the needs of the student or the performance standard in the contract. As a result, organizations outside the traditional educational circles are often more successful in competing for contracts.

The most significant challenge in the government-institutional relationship is the extreme diversity of the student population that must be served. This diversity has shaped an open-door model so frequently advertised but seldom delivered for all levels of ability. The requirements of this diverse audience are encouraging educational institutions to develop more effective assessment systems and adult counseling services that will eventually be available to other adult students.



CHAPTER IV

INSTITUTIONAL CHANGE

A model for change already exists in many institutions in a division of continuing education, a business and industry service group, or possibly an economic development group. These departments are widespread in community colleges, and they have been charged with the role of addressing the many nontraditional, primarily adult-oriented responsibilities of the institutions. The arrival of the adult majority will necessitate the adoption of various aspects of these models by the more traditional elements of the institution. "Our present structure of higher education will change because society will view education as a lifelong process, not as a segmented administrative structure, with time as a constant and learning as a variable" (Gannon I983, p. 41).

Mission

The history of the 2-year postsecondary institution is one of an institution adapting to change in order to meet the needs of the society. It is also a history of debate, from without and within, concerning the mission and goals of the institution. After reviewing five major works related to the future missions and functions of community colleges, McCarten (1983) concluded that there are basically two distinct camps: one that recommends a broad range of educational and related services based upon community needs, and one that emphasizes strengthening for the traditional role as a "college."

The adult majority has intensified the debate in that it has become a powerful force on the side of a broad mission. The current situation in 2-year postsecondary institutions is not unlike that of a business that has outgrown its internal concept of its area of responsibility. The move of railroads from the railroad business to the transportation business enabled them to develop the lucrative piggyback service. If institutions are unable or unwilling to make a similar transition, the new business of adult training may be lost.

Many participants in the debate agree with Richard Sheridan, an associate professor with Cleveland State University, who indicates that "we haven't revised our approach, and I'm suggesting we never will" (*The Columbus Dispatch*, 29 April 1984). He proposes a new type of school to address the specific needs of adults. Others maintain that the history of adaptation indicates a willingness and ability to change.

The mission decisions can be expected to be made by States and by individual institutions. Based upon the field interviews, the conventional wisdom is that during the next two decades, the major universities and better 4-year schools will attract a large percentage of the traditional college students, while the 2-year institutions have the best chance to attract the occupationally oriented student, the working adult, and the less-qualified student. If this should be the case, it would indicate that the traditional college role for 2-year institutions will continue to be deemphasized and will be replaced by more nontraditional, occupationally oriented activities.

There is an increasing differentiation of missions between the urban and rural institution.

Of those interviewed during the study, only one chief executive officer expressed the conviction that the institution would thrive with a mission that could be classified as traditional. Others agreed that the marketplace would define a broader mission with adults playing a more important role.

Yet, the mission of individual institutions will not be uniform. There is an increasing differentiation of missions between the urban and rural institution. This has led to the establishment of the Commission on Urban Community Colleges and the Commission on Small/Rural Community Colleges within the American Association of Community and Junior Colleges structure, and is not inconsistent with the differentiation between urban and nonurban universities described by Gorman (1981):

> Probably several more decades will pass before it will generally be understood that the differences between the two kinds of institutions reflect their milieu and mission, that neither is better or worse than the other, and that neither properly serves as the model for the other. (p. 5)

The small, rural, 2-year institution tends to have a more traditional mission. This consists of a balance between the transfer and occupational training components, and a small nontraditional component. The competition for traditional students is growing, but the costs, distance, and local job opportunities will keep significant numbers of rural students at home for the first 2 years of postsecondary education.

The urban, 2-year institutions have moved more toward occupational training and generally have large nontraditional programs. Their traditional transfer students are increasingly being recruited by nearby universities and 4-year institutions. The 2-year institutions are expected to work with the community to help solve a broad range of the urban problems. Job training and retraining are becoming increasingly important, as is reflected by the large JTPA contracts currently being offered.

As these two types of institutions, urban and rural, grow further apart, it will be increasingly difficult for funding agencies to establish uniform funding formulas to address the needs of both. The traditional FTE funding continues to meet many of the needs of the small, rural institution with traditional programs. However, FTE funding fails to provide adequate support to the growing number of nontraditional programs of the urban schools.

Given the diversity of individual institutions in unique communities, the questions of a mission for 2-year institutions is a difficult one. Parks (1983) argues that "institutions of higher education must be able to serve as the vehicle for providing adult students the 'options' for successful passage through these transition periods" (p. 9). The gulf between the past and the future is seen clearly when this statement is compared to the traditional refrain that schools are established to "educate/train our youth."

Gilli (1976) addresses the issues emerging from the conflict between the mission to serve adults and youths by examining a utopian concept that supports the creation of two "universal colleges" operating simultaneously, possibly on the same campus. One would serve the adolescent with no previous full-time work experience of any consequence, and the other would serve adults requiring midcareer change, skill upgrading, and skill updating.

Gilli's concept is intriguing and provides valuable insights concerning the issues at hand, but the pragmatic approach will probably more closely resemble that outlined in New Jersey's *Statewide Plan for Higher Education* (1981):

> The Community colleges should continue to be the open door to higher education in New Jersey by providing training in skills proficiencies and the first two years of a college level education to the broadest cross-section of society. They should continue their policies of open admission and low cost tuition. In order to achieve their enrollment goals, the community colleges should:
>
> 1. Attract larger numbers of part-time and adult students during the next five years and plan for appropriate expansion in student services to meet their needs;
>
> 2. Augment the social goals of open admission by actively recruiting minority, disadvantaged, non-traditional, adult and handicapped students through efforts to increase their awareness of the opportunities for and benefits of further education;
>
> 3. Establish a minimum goal of enrolling a freshman class with 10% EOF students; each college's minority enrollment goals should broadly reflect the composition of the population of the county which the college serves;
>
> 4. Provide strengthened and expanded remedial and developmental programs to permit underprepared students to gain competencies in the basic skills;
>
> 5. Make new efforts to increase student retention so that a larger proportion of entering students complete an associate degree program or achieve their own personal goals;
>
> 6. Continue to increase the number of program articulation agreements with 4-year colleges in order to ease and improve the opportunities for students to transfer, especially into professional and technical upper division programs with specific prerequisites; and
>
> 7. Work cooperatively with other organizations such as CETA programs, area vocational-technical schools, and local businesses to expand the number of joint programs available to students. (pp. 76-77)

Those interviewed during this study indicated that the stress caused by the differing needs of the young and the more mature students will remain, and that institutions will continue to serve both. Yet, in the future the young students may be asked to adapt more and more to an adult-oriented model designed to serve the majority, much as adults have adapted to youth-oriented models in the past.

The successful adult-oriented models are based upon the lifelong learning concept. Full acceptance of this concept relieves educators and trainers of the responsibility to condense all possible information into a single program (irrespective of immediate need), because something may be needed at a later date. It frees the educator and institution to design and offer programs that more closely address immediate needs and build on past experiences. Therefore, the global mission becomes one of assisting individuals in solving problems through education and training.

Governance

The long-term developments in academic governance are listed by Kerr (1982) as moving from "dominance by the board of trustees beginning in 1636, to dominance by the president after 1870, to dominance by the faculty after 1920, to present and greater prospective dominance by the student market" (p. 30). The relatively recent development of the expansive network of 2-year institutions occurred during the transition to a market-dominated environment.

The governance of public postsecondary institutions that provide occupational training varies extensively from State to State and even within States. Gentry (1983) lists four approaches to governance at the State level:

- States with one agency responsible for all education
- States in which a separate board or agency is responsible for the vocational component and other boards or agencies are responsible for other aspects of education
- States in which the board responsible for vocational education is also responsible for elementary and secondary education
- States with structures that differ from the above

The consensus among those interviewed was that the advent of the adult majority would not bring about dramatic short-term changes in the governance structure of 2-year institutions. However, a number of trends were identified that can be expected to have at least subtle effects upon the governance process. Three issues were identified that appear to be of common interest. These are (1) the decentralization/centralization movement, (2) the increased involvement of business and industry, and (3) regionalization.

The decentralization/centralization issue is perhaps the most prevalent. As the Federal Government reduces its participation in education, its centralizing powers are reduced and more decision making is decentralized to the States. This, added to other issues, has created significant pressures for change at the State level. States are faced with changed expectations and governance structures that are often unable to respond to the new expectations (Gentry 1983).

As States are asked to assume greater financial responsibility for education, a need for a more intensive evaluation of existing programs and institutions develops. As a result of this need, there is a movement for some centralization of decision making to the State level. Indications of this trend are evident in the activities of several states.

In a recent study, Improving the Partnership, a Joint Commission on Vocational and Technical Education of the Ohio Board of Regents and Board of Education (Ohio Board of Regents 1983) discovered evidence of duplication in some services in the area of postsecondary adult programs. The resulting recommendation was as follows:

> The Commission therefore recommends that the Ohio Board of Regents and the State Board of Education appoint a broadly representative coordinating committee to advise both boards on matters related to

> vocational and technical education, including the review of new program initiatives, requests for state funding for additional facilities and equipment, and general maintenance of the unique purposes of the two systems. (p. 14)

In Tennessee and Alabama, community colleges, postsecondary area vocational schools, and 2-year technical colleges have been pulled together under a single administrative office. In Georgia, the postsecondary area vocational-technical schools have been reorganized under a board that is separate from the Georgia State Board of Education, and speculation exists that eventually there will be some type of further centralization to include junior colleges.

Even States with strong commitments to a decentralized postsecondary system report that budgetary pressures in their legislatures are generating some reduction in decision making at the local level. These problems are compounded by the need to support new high-technology programs that can be very expensive. Gladieux (1980) summarizes this:

> I think the big decisions in the period ahead are going to be made by the states. The landscape of postsecondary education, the division of labor among types of institutions, the probable adjustments that will need to be made to deal with excess capacity in the higher education systems, the assurance of educational quality; all of these fundamental matters will be decided within the states and, in some perhaps substantial measure, by state authorities. (p. 111)

The increased involvement of business may also have subtle effects on governance. Most of those interviewed emphasized the positive aspects of the increased involvement of business and industry. However, there was a recognition, as one educator put it, that "the more money, the more say." The concern expressed was that financially healthy companies could "buy" input into the program design and the equipment used for training at the expense of the less-affluent competitors. The impact of extensive business and industry involvement can be powerful. Timpane (1984) documents activity by the California Business Roundtable that provided an educational agenda for the State including minimum graduation requirements, improved State testing, guidelines for State curricula, stronger attendance and disciplinary rules, changes in rules for teacher dismissals and layoffs, and new teacher training methods.

The problem presented to educators and governing boards is one of defining the appropriate role of outside organizations that seek to have input in and to provide support for the education and training processes. At the same time, it is also important to educate faculty and staff about their responsibilities as professionals in education when they are involved with outside groups.

The issue of regionalization is a time bomb in the governance arena. Two-year institutions were justified on the basis of arguments that (1) the local youth could be educated for transfer to the university or to fill local labor requirements and (2) an institution should be within easy commuting distance for every student in the State. Changes in technology have eroded these concepts.

The issue of regionalization is a time bomb in the governance arena.

Most institutions now recognize that much of their present technical training is preparing students for local, regional, and even National employment. The change to training for regional employment places the institution in competition with all other institutions in the region. There is competition for funds for such specific programs as robotics, for qualified faculty, for students, and for student placement. The institution is no longer limited to its traditional service area of 30 miles, 1 city, 5 counties, or in some cases, 1 State.

The second factor, distance, may represent an even greater revolution. The technology for effective delivery of educational/training programs using electronic media has advanced rapidly in recent years, and many institutions have begun to exploit the opportunity to use such technology. In many instances, programs go far beyond the "service area" of the institution, and may create interinstitutional friction. The definition of a "service area" can no longer be limited to lines on a map. Its definition may need to include the range of a transmitter or cable coverage, or the footprint of a satellite.

As a result of these developments, States are forced to begin to redefine institutional relationships. Ohio's Joint Commission on Vocational and Technical Education (Ohio Board of Regents 1983), referred to earlier, made the following recommendation concerning this issue.

> The Commission therefore recommends that there be established local or regional coordinating mechanisms which would assess educational needs, inventory available services and capabilities, endorse new program requests and requests for new educational facilities and equipment, encourage transfer of credit arrangements, establish program goals and levels of responsibility, and identify the skill requirements of graduates completing programs at the vocational and technical levels. (p. 15)

Early in the 1980s, Texas found it necessary to place a temporary moratorium on the further development of telecourses until a statewide review could be conducted. The review examined courses capable of being delivered via open-channel television, cable television, low-power television, communication and/or direct broadcast satellite, satellite master antenna systems, microwave, videocassettes, and telephone lines. Recommendations of the Telecourse Study Committee included extensive course-by-course review and approval at the State level. In addition, provisions were made for review of interinstitutional disputes.

The response to increased regionalization has been a trend toward increased cooperation and coordination at the local, State, and regional levels. Much of the coordination and cooperation is voluntary; however, when the coordination becomes a power-rationing process, it moves beyond a voluntary association to one of bargaining and eventually to a command decision level (Rawlins 1983). An analysis of the current environment in education would tend to support an increase in the number of command decisions.

Those interviewed for this study agreed that regionalization will have a significant impact upon postsecondary education. They also emphasized that the concerns related to regionalization are not limited to organizations within a State but, with satellite delivery, must eventually address competition from both the National and international levels.

Structure

Initial responses of postsecondary institutions to the growing adult population have consisted of the extension of the regular day program into the evening, and the establishment of specialized positions and divisions such as night school coordinator, industrial coordinator, continuing education, and public service. In many institutions, the activities carried out in these areas are largely self-supporting and are operated independently of the mainstream activities of the campus. Regular full-time faculty members are used sparingly and the funding for support activities are often minimal. (During this period of change, the structure to support the traditional student remained relatively intact.)

The structure to support the traditional student was patterned after the 4-year academic model. Integration of new functions (designed to support adults) with differing requirements into an organizational structure that evolved for another function has created organizational stress. To respond to the needs of the adult, the institution must move from a largely undifferentiated structure to one that can provide differentiated responses based upon individual need (Guthrie-Morse 1981).

In a discussion of urban school reform, Levine (1971) makes three observations that are also applicable to postsecondary institutions seeking to serve adults. First, either the institution should become less complex, or clients should be equipped with ways to handle the complexity. Second, the social and psychological distance between client and institution should be reduced. Third, provisions must be made for additional information feedback concerning every aspect of the operation of the institution. He further indicates that the implications of such changes include the allocation of authority laterally rather than hierarchically, and that organizational structures must become experimental and fluid rather than fixed and permanent.

Terms used by Levine are characteristic of other words and phrases often being used to describe the characteristics needed in the next two decades by effective educational organizations. These include flexibility (the term used most often), fluid, responsive, open, cooperative, differentiated, proactive, anticipatory, outwardly oriented, and need oriented.

Educational institutions are faced with a challenge . . . to make an existing structure more flexible and responsive to its environment.

Based upon past responses to the need for change, evolution rather than revolution can be expected. Educational institutions are faced with a challenge that has been encountered by business and the military. The challenge is to determine ways to make an existing structure more flexible and responsive to its environment. One solution used in the military and business is the development of temporary structures or task forces that are made up of representatives from across the organization.

The advantage of the task force approach, as compared with the addition of specialized divisions such as continuing education, is that its response is broadly based and may involve all elements of the institution. It also introduces the need for change to all elements of the institution, and provides new models for methods of responding to the new clientele.

Although this concept has been used by postsecondary institutions for special projects such as institutional self-studies and other exercises related to certification, its regular use would require the development of task force management capabilities, a revision of work load policies, acceptance on the part of faculty and staff, and other major revisions in practice.

Many aspects of the necessary changes exist in institutional units (such as continuing education) that have been established to serve adults. Other examples of alternative structures that may be indicators of future direction include the "colleges without walls," the Community College of the Air Force, and colleges such as Sussex County Community College and Warren County Community College in New Jersey that contract the teaching of their courses with other educational agencies. All of these have created new structures and procedures to support their unique needs.

The need for structural change in order to improve response at the local level is directly opposed to the previously mentioned trend toward increased centralization of decision making. This issue may become one of the major governance/management issues in the next two decades. The ability of existing institutions to respond adequately to changing needs will depend upon the ability of governing boards or agencies to establish adequate review mechanisms without severely limiting decision making at the local level.

Funding

The issues involved in the funding of 2-year postsecondary institutions are as diverse and complex as the institutions themselves. The arrival of the adult majority is coinciding with (1) a Federal Government retreat from educational funding, (2) an expected enrollment decrease that may reduce total income and increase fixed cost per student, (3) increasing faculty costs as faculties grow older, and (4) decreased financial management options as inflation evaporates discretionary funds. A major change in direction is often difficult even in a period of expansion, and the current economic climate will make change extremely challenging. However, in some ways the difficulties may force institutions to be more responsive to the economic potential of the growing adult clientele.

The reader is referred to a Brookings Institution study conducted by Breneman and Nelson (1981) for a comprehensive review of the issues involved in the funding of community colleges. The remarks in this document are primarily relevant to issues that are directly related to the adult and part-time student.

Appropriation formulas that are currently used by most States were supportive of the expansion during the enrollment boom. When enrollments turned downward, educators realized that the financial base for the institution would be quickly eroded and the quality of programs would suffer (Gurson 1980). The increase in part-time enrollment intensified these concerns because it takes two to three part-time students to equal one FTE. Therefore, although head count increased in many cases, FTEs went down, resulting in a loss in revenue. These trends also created problems for nontraditional programs because many institutions provided support for some nontraditional program expenses out of FTE-generated funds.

A related issue is the limitations imposed upon student aid. It is widely accepted that student aid is an indirect form of institutional support and is primarily supportive of full-time students. As full-time students decrease and part-time students increase, the institutional support from student aid is reduced. Kegel (1977) indicated that 65.6 percent of the colleges he surveyed reported that fewer than 50 percent of their part-time students received any financial aid. Over one-third of the schools reported that less than 10 percent of all part-time students received financial assistance.

These issues have led to demands for the revision of funding formulas and the increased use of student aid for part-time students. Suggestions in the *Statewide Plan for Higher Education* (1981) for New Jersey are representative of some of the proposed solutions:

> 1. The state should discontinue the funding of institutional support activities on the basis of full-time equivalent students and instead fund these activities on the basis of weighted headcounts of actual students.
>
> 2. The Department should undertake further study to develop funding formulae based on actual costs for institutional support activities, similar to formulae now used to fund physical plant operations. These formulae should take into account the basic "core" costs and the economies of scale that are related to the size of an institution's student enrollment. (p. 171)

These responses to the problem are supported by findings in other States. State Research Associates (1983) recommended that Mississippi "develop a cost-based approach to reimbursing local providers of vocational and technical education" (p. 18).

How funding formulas should be designed is not the only debate that is taking place concerning the funding of 2-year institutions. There is a growing debate as to who should pay. That institutions provide job-specific training at low or no cost is largely fueled by the increasing demands of business and industry, and often supported by educators. Charges of industry subsidies are countered with arguments that government-supported training is necessary to be competitive in the world marketplace. Other questions are raised as to what the proper balance should be between the obligations of individuals and Federal, State, and local governments.

There is a growing debate as to who should pay.

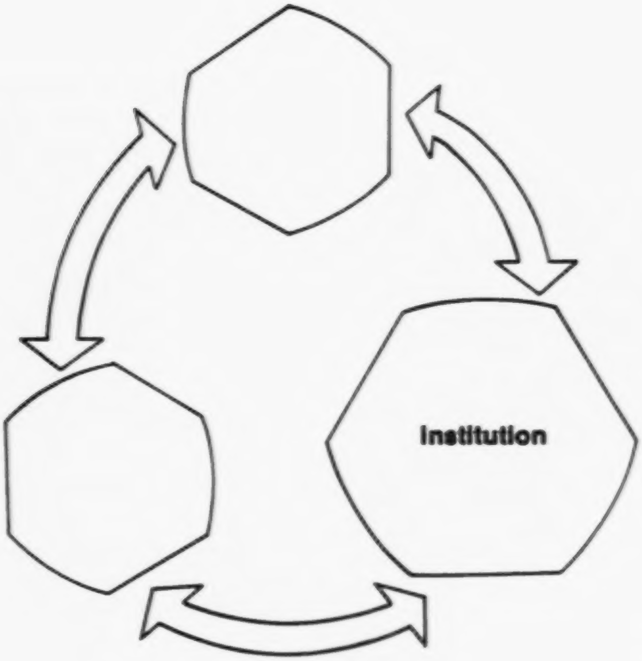
Breneman and Nelson (1981) approached the question using a benefit analysis approach. They concluded that funding for academic courses and most vocational-technical courses should be shared between the individual and State and local governments. Remedial programs should be funded completely by State and local governments. Vocational programs conducted as part of an economic development activity should be funded by State and local governments. Vocational programs designed to provide highly specific job training for individual firms should be supported by the firm. Carnevale (1983) agrees that there should be some degree of cost-sharing based upon the ability to pay. That is, some of the costs of training that benefits both individuals and employers should be shared between the two.

A changing clientele also implies changes in the types of programs, and a need for funding to support the new programs. Paulsen (1981) argues that funding for programs offered on a continuous basis fails to give adequate support to the growing numbers of short-term programs for skill training. Most States do not adequately reimburse the high costs of customized curriculum and program and staff development activities that are conducted on a one-time basis. Some States (South Carolina, Tennessee, and others) have identified specific funds to be used for short-term training for economic development.

Funding for short-term training is also available from JTPA and other specialized Federal programs. Many institutions have realized that these sources can make an important contribution toward institutional survival and are developing the expertise to attract these programs and conduct effective short-term training.

Those interviewed for this study agreed that during the next two decades the vital institutions must, more than ever, develop a balanced mixture of funding sources that include Federal, State, and local (where possible) grants and contracts, private gifts, endowments, income from sales and services, and so forth. Growing pressures on State funds for other human services are expected to depress future growth from this source.

Jenkins (1984) reported that between 1978-79 and 1982-83, some colleges had begun to make significant increases in the variety of funding sources and the amounts received from these other sources. The increases came in endowments, private gifts, State grants, and sales from educational activities and auxiliary enterprises. Administrators and faculty can anticipate increasing demands for a variety of educational and training services with limited support in the form of new funds from traditional sources. Success will depend upon effective allocation of scarce resources and a growing spirit of entrepreneurship in the educational marketplace.



CHAPTER V

THE MESSAGE AND THE MESSENGER

Program Parameters

Programs for the adult majority can be expected to reflect the characteristics of the multiple option society described by Naisbitt (1982) in *Megatrends*. Future programs must be tailored to the needs of the students as they enter and leave the system, mixing work and retirement with education and training. The task will be to remain adaptable and flexible "to accommodate the changing needs of a changing population, while avoiding chaos and maintaining standards" (Sussman 1981, p. 2). The adult majority will necessitate a further expansion of the number and type of services and modifications of the delivery system.

The development and delivery of effective programs and services during the next two decades will involve a number of parameters that include appropriate program objectives, effective and efficient processes, appropriate outcomes, and effective faculty. The list is not all inclusive, but a review of these parameters can provide a basis for understanding the direction change may take.

Some characteristics of the new direction of postsecondary occupational education and training are shown in figure 1. Programs will be designed to assist one group of individuals with job entry, another with reentry, another with job upgrading, and yet another with job updating. Improved assessment programs will provide credit for prior knowledge and experience. Opportunities for open entry and open exit will be common. Programs will range from the traditional degree/certificate programs to short-term, intensive, job-specific training. Many of the programs will be customized for small groups of individuals, and they will have a modular, time-variable, learning-constant design, emphasizing a competency-based approach.

Additional characteristics include a vastly increased number of cooperative arrangements with business, industry, the military, and other community groups and organizations. An indirect effect of these cooperative arrangements will be a growing use of contracts. (Contracts will be used when the institution provides training to other organizations and when other organizations provide specialized training for the institution.) Although programming to meet the local needs will continue and probably expand, the trend toward increased regional programming will accelerate. This trend, combined with the increasing use of electronic media to serve large areas of a State and the Nation, will necessitate extensive institutional coordination and cooperation with other institutions and governing agencies.

Probably the most significant modification to the approach to programming in the future will be the move from being reactive to proactive. The increased rate of change has created serious problems for educational systems that are primarily reactive by nature. By the time current needs are identified, programs are proposed and approved, and appropriate staff are hired, the organization with the training need has resolved the problem in other ways. Increasingly, educational institutions are being pressured to be active participants in societal change. The competition between States for economic development has involved education in an active role in the change process. No longer can institutions remain removed and aloof from daily concerns as they train individuals for very specific jobs in a very specific company. Education, especially at the 2-year postsecondary institution, is more than ever expected to be part of the change process and, in some cases, to lead the change. The rapid acceptance of microcomputers can be partially attributed to widespread training programs offered by educational institutions. The contrast between the past and present is evident when the institutional response to training for microcomputers is compared to the relatively slow response to training computer programmers in the 1960s. At that time the training was primarily left to the vendors.

Increasingly, educational institutions are being pressured to be active participants in societal change.

Proactive programming will require new faculty skills and changes in priorities. Those interviewed generally agreed that the faculty is already changing and that further changes will take place in the future.

Program Objectives

Increasingly, program objectives will be dictated by the needs of individuals or groups of individuals. Yet, there will continue to be a significant population of high school graduates that must be processed through a program with some linearity. In the highly technical areas, the programs for both youth and adults may continue to be primarily linear in nature. The problem with this design in other areas is that it tends to be discrete from career to career, as is shown in figure 2.

A sequence of courses is designed (one stacked upon the other) for each career with a single point of entry—the initial course (1A or 1B or 1C). A move from one career to another almost always requires starting over with little regard for past experiences. Of course there are provisions for recognizing traditional credit courses that represent training acquired in one program that is applicable to another, but there is often little flexibility in recognizing other types of experiences, as military personnel frequently discover when they return to civilian educational institutions.

Training for reentry, upgrading, and updating is often time critical, and it is desirable to minimize the program content to include only the required information and skills necessary for job performance. This type of training requires a matrix concept, or what

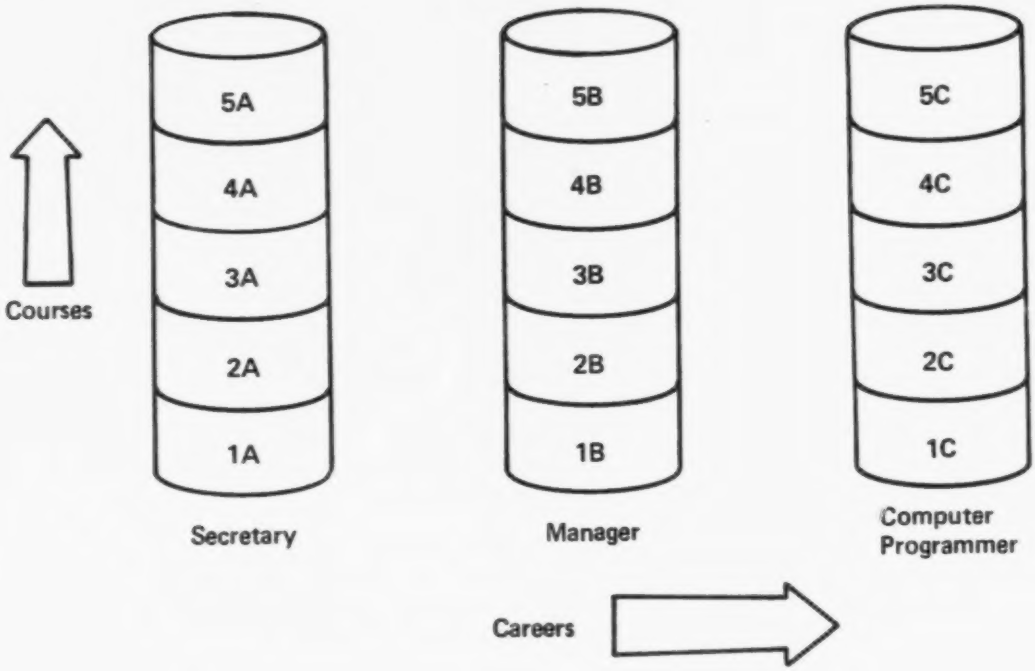

5A
4A
3A
2A
1A
5B
4B
3B
2B
1B
5C
4C
3C
2C
1C
Courses
Secretary
Manager
Computer Programmer
Careers

Figure 2. Linear design for career development

Dr. Russell Wilson* refers to as a ladder/lattice concept.

The matrix concept is shown in figure 3. This concept provides for the horizontal movement of individuals changing careers. Programs are no longer designed merely to move the individual up the vertical axis. Instead, there are also programs to move the individual from one career to another without necessarily starting at the bottom. Although the concept is not new, the significant issue is that the adult majority will generate a tremendous need for connecting courses and programs.

This concept is already in use by some institutions to help professionals who wish to change fields or those who wish to obtain advanced, formal recognition in fields in which they have worked for a number of years. The University of Virginia's 6-week Career Opportunities Institute for Ph.D.'s in the arts and sciences combines rigorous training in business principles with instruction in career planning. Upon completion of the program a majority of the participants elect to change careers. Georgia State University and others are providing intensified, abbreviated MBA programs for business executives. This practice also exists in 2-year institutions that have contracted for JTPA-funded programs to retrain the unemployed for another career in short-term, intensified programs. Yet, little has been done to plan and develop regular credit programs to accomplish this purpose for the regularly enrolled student.

Parnell (1982) summarizes the issues involved as follows:

> A person who comes to a postsecondary institution with prior life experiences and prior work history may not need to fulfill all the general education requirements that we insist upon for the eighteen or nineteen-year old students. It requires some new thinking to serve new types of students. What do they bring to us? We cannot treat older students as if they bring nothing to us as an educational institution. (p. 5)

Could the lifelong learning model be a multidimensional model, and are institutions currently programming in only one dimension at a time? Significant changes in program objectives will require changes in some traditional assumptions. Three of the major issues are related to time, place, and recognition.

There are growing pressures for programs that are time variable. Traditional programs have been primarily time constant and learning variable. The programs are designed to be completed in specific time frames (1 year or 2 years) and at diverse levels of competency (based upon learning ability and styles). There is little value placed upon the time invested by the individual. Those who have been advanced graduate students can fully appreciate this observation. An adult with a home mortgage, auto payments, and children has a different concept of the value of time than the 18-year-old who lives at home and is totally supported by mom and dad. Of course those in 2-year institutions will rush to point out that not many of these types of students (who do not work) attend their institutions. Yet, that knowledge is seldom fully reflected in program objectives or the attitudes of faculty and staff toward the students' time.

Full acceptance of the lifelong learning concept makes it quite acceptable to provide only the part of the training that is needed at the time, with the expectations that with open-entry/open-exit programs, the individual can easily return for the remainder, when it is needed. Therefore, the program format in the next decade can be expected to vary from 3 years (already in existence in technical programs in a few 2-year institutions) to 1 day (or even hours). In addition, the programs will be increasingly competency based (or learning constant).

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The time-variable concept is not restricted to the length of the program, but also includes the time the program is offered. Program offerings have already been expanded from the traditional 8 a.m. to 5 p.m. to include early evening, 6 p.m. to 10 p.m., and even weekends. Change is continuing to occur. In one location surveyed, it was found in some courses that faculty teaching hours change regularly to match those of the students who work the swing shift in a local industry. The institutional flexibility of a swing shift teaching schedule reflects the vitality needed in the decades ahead.

The concept of a place-variable approach has grown rapidly as institutions have discovered that moving from the campus into the community's businesses, industrial plants, and secondary schools increases enrollment. New advances in electronic media can be expected to accelerate acceptance of the place-variable concept. Successful "colleges without walls" have provided momentum to this trend. As new program objectives are developed, the location component becomes more important. Successful execution of off-campus programs requires a realistic evaluation of the learning environment, the need for immediate access to learning resources, and effective methods of review and control.

Adults have a variety of motives for enrolling in educational programs, and these do not always include the need for recognition involved by the awarding of credit. Although

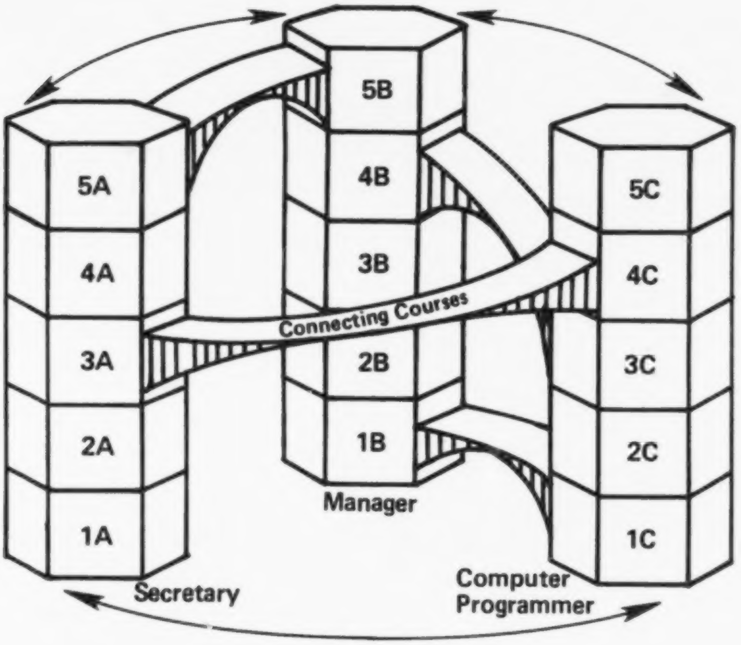

Figure 3. Multidimensional design for a career matrix

The concept of a place-variable approach has grown rapidly as institutions have discovered that moving from the campus into the community . . . increases enrollment.

content will be important, the motives of the individual will determine his or her expectations of desirable outcomes (Parks 1983). As a result, a primary focus of program objectives can be expected to change from providing individuals formalized credit toward a degree or certificate to providing more competency-based education or training that responds to the needs and interests of the individual, the organization, or the government.

This may lead to a reduction in the use of formal recognition (degree, certificates, and so forth), but not necessarily. The alternative is to modify the way we use current measures of accomplishment. One example is the awarding of a fraction of a credit hour, as is done with continuing education units (CEUs). It is also possible that other units such as the CEU can be developed to meet new needs. As we look to the future, the measure of accomplishment should be designed to fit the training, rather than the training being designed to fit a predetermined measure of accomplishment.

Program Elements

Modified institutional goals and program objectives can be expected to have a significant impact on the educational process. Although redundant, it is necessary to continue to emphasize that the process will become more client oriented. Time-variable objectives will lead to an increased emphasis being placed upon the development of modular programs. In addition, the modular approach is more adaptable to the matrix concept presented earlier.

Garbarino (1984) proposes a full-service concept that is designed to provide services to support adequately the adult student. The components of the full-service concept are assessment, academic module, vocational module, support services, and placement. A modified list of these components will be used in this document to examine the changing educational process in 2-year institutions. The components used in this discussion will be admissions and assessment, academic module, occupational module, placement, evaluation and outcomes, and auxiliary services.

Admissions and Assessment

The arrival of the adult majority is necessitating a rethinking of past open admissions policies. Although the concept of open admissions has been a reality for years, the problem presented by the increasing numbers of adults is one of institutional commitment and capability necessary to provide a reasonable assurance of success to those who are least prepared. Accepting and washing out large numbers of students has not been in the past and is not now a satisfactory institutional response to the needs of adults.

The fulfillment of the open admissions promise in the past has often been limited. Korim (1981) argues that

> the full development of a methodology commensurate with the demands of open admissions has never been achieved. Intake processes have been deficient. A full diagnosis of deficiencies has been resisted. Shortcuts in corrective prescriptions have been common practice. The added costs associated with services for the deficiency differences have remained concealed.
>
> In the decade of the 1980s community colleges must deal with open admissions aggressively and creatively. (p. 14)

The successful admission of adults will increasingly involve the need for improved assessment. Assessment must be expanded from efforts to identify the academic deficiencies of the applicant to include assessment for credit for previous experience and career counseling. The heart of an effective assessment must be a "personal growth plan and a career blueprint for the future" (Garbarino 1984).

Several models of diagnostic centers have been established throughout the country. Regional examining institutes have been established in New England to assess an individual's competence for both business and educational purposes. An individual may go to the center, be assessed, and present the assessment to a college for credit. The examining center is able to respond to the needs of both industry and higher education in a neutral environment (Hodgkinson 1980).

The Dallas Community College District (DCCD) identifies seven categories of applicants that may receive college credit for prior learning experience. These categories are as follows:

- Graduates of regionally accredited proprietary schools
- Individuals with current or active professional certificates, licenses or credentials in a recognized profession
- Individuals who have completed business, industry or military programs recognized by the American Council on Education
- Individuals successfully completing challenge examinations on campus or college level examination program exams
- Recent high school graduates who have completed equivalent vocational programs in accredited secondary schools
- Individuals completing courses in other institutions, professional organizations, business, and industry for which advanced arrangements have been made with [DCCD]
- Individuals with other life experiences that do not fit into the other six categories (Lindahl 1982, p. 44-45)

The 1981 Statewide Plan for Higher Education for New Jersey included the following recommendation:

> All colleges and universities should be encouraged to develop and implement a wider and more diversified range of testing and assessment options as alternatives to usual coursework for both traditional and nontraditional students. (p. 163)

Thus far, efforts to assess the ability of individual students have been primarily directed toward the credit students. There is an increasing awareness that improved assessment of those in noncredit programs is also critical. This concern is manifested in increased assessment and counseling services included in many JTPA proposals.

Those interviewed during the study emphasized the need for continuing changes in student services. The role and scope of student service activities have changed significantly from that of primarily regulating student behavior and conduct to that of addressing student needs in the personal, social, and emotional realms (*The Statewide Plan for Higher Education* 1981). The emphasis on these services will continue to change as adults seek assistance with the problems of career change, unemployment, and balancing the demands of both work and school.

Those counselors who have been formally trained to deal with the problems of 18- to 22-year-olds must now be upgraded to address the needs of a diverse student body in the next two decades. Counselors in the next two decades must be prepared to address the problems of the 18- to 22-year-old, the part-time student, the unemployed, the underemployed, the professional who is returning for update training, and so forth.

Effective assessment programs will also be necessary to attract adult students and to design successful programs for business and industry. This growing market is both objective and results oriented. Once assessment and career counseling are completed, the client is placed in appropriate activities, either in the academic module, the occupational module, or some combination involving both modules.

Academic Module

The academic module can be examined in two components, both of which are in a state of flux. The first component is the traditional liberal arts component, and the second is the basic skills component.

Although the tendency is for institutions to stress the need for general education, the growing practice is to provide more job-specific or industry-specific training. This movement is a result of several developments, including increased student interest in occupational training, increased contract work with business and industry, increased activities involving JTPA students, and the growing pressure to involve local business and industry in curriculum development and evaluation.

The time pressures of adult students also add to the pressure to condense and intensify programs so that time spent in general education is minimized. Many institutions are responding to these pressures by developing general education courses that relate more closely to the world of work. Bradford College, a 180-year-old liberal arts college, built an entire curriculum based upon the concept that the liberal arts could be used to prepare students practically for work (Levine 1984).

Cohen and Brawer (1982b) conclude that in order for the liberal arts to thrive in community colleges, the way they are presented must change. The proposed changes require a recognition of the diversity of the student body both in interest and ability, and a differentiation of programs for transfer, compensatory, and career studies.

Increasingly, faculty in academic divisions at 2-year institutions are being asked to review the objectives of their programs and to provide courses that are more closely attuned to the needs of the individual student. This requires an increased understanding of the motivation of individual students and an increased capability in program design.

The basic skills or remediation component is largely based upon the needs of (1) youth who failed to obtain the skills in primary and secondary schools, (2) adults who failed to obtain the skills in primary and secondary schools, and (3) adults who have lost the skills with the passage of time since they departed from high school.

In Mississippi, the results of recent ACT composite scores indicated that 56 percent of the technical students and 46 percent of the academic students in junior college were deficient in basic skills.

The current debate about the quality of education has emphasized the large number of high school graduates who are not equipped with basic skills. The *Chronicle of Higher Education* ("70 Pct of N. J. Freshman," 1 February 1984, p. 2) reported that 70 percent of the high school graduates who entered public institutions in New Jersey in the fall of 1983 lacked the basic skills to read, write, and compute at the college level. In Mississippi, the results of recent ACT composite scores indicated that 56 percent of the technical students and 46 percent of the academic students in junior college were deficient in basic skills (State Research

Associates 1983, p. 111). The addition of high school dropouts increases the magnitude of the problem.

Two-year institutions and even universities are not unaware of the need to provide remediation for freshmen. Most institutions provide some form of formal or informal programs that are designed to improve basic skills.

The adult remediation problems may be even more acute. Some 65 million adults lack basic competency skills (Gilbert 1980), and many others have skills that are "rusty," and they need remedial programs for renewal. In addition, the rapid change in technology is introducing the need for new basic skills (such as computer literacy) that have not been available to adults at any point in their lives.

As 2-year institutions respond to the need for training, retraining, and upgrading the work force, they are faced with students who need skills that span the academic spectrum. Individuals with graduate degrees have returned to these institutions to obtain new job skills, and high school dropouts have entered through specialized programs such as CETA and JTPA. To be effective, the institution, therefore, must be able to respond to individual needs, objectives, and learning ability and style of the student.

The influx of sizeable numbers of CETA students in the early 1980s stressed institutional capabilities to address the remediation needs of individuals with numerous deficiencies. New programs were developed that addressed everything from academic deficiencies to appearance and interpersonal skills. Generally the objective was to solve a problem (unemployment). The approach was to develop the educational and training activities necessary to solve the problem. Future policies of open admissions must embrace these types of commitments.

The debate over remediation is being conducted both outside and inside the walls of the institutions. Increasing pressures on State budgets are making remediation programs at the postsecondary level attractive targets. The board of trustees of the California Community College system has urged institutions to increase the emphasis on transfer and vocational education programs and to deemphasize remedial and other programs ("2-Year Colleges to Focus on Transfers, Job Training," 8 February 1984, p. 3). Florida has entertained the concept of phasing out all postsecondary remedial programs by 1990 (Pipho 1983). Georgia and other States have investigated similar objectives.

The debate over remediation is being conducted both outside and inside the walls of the institutions.

In the opinion of those surveyed, remediation will play a significant role in 2-year institutions indefinitely. With the increased emphasis on academics in secondary schools, the future reduction in the number of high school graduates that do not have basic skills can be expected to relieve some of the pressures. However, the large numbers of adults needing assistance will remain. If 2-year institutions remain the primary source for training, they must address the needs of those who are underprepared. Therefore, there seems to be a growing gap between the desires of the leaders in some States and the realities at the institutional level. Institutions in these and other States may be left with a conflict created by broad goals to help adults solve problems and by limitations placed upon their ability to respond.

Academic divisions in 2-year institutions are also faced with change in other areas. Many of the programs being developed by universities and colleges for distance learning (using electronic media) fall in the academic area. TeleLearning, a new telecommunications network, will enable colleges to deliver credit courses from afar. A consortium of universities and colleges is currently investigating the use of the network and developing courses (Turner 1984, p. 14). Nationally, many courses are already being transmitted by local cable and short-range broadcast television.

The vitality of the academic divisions of 2-year institutions is crucial to the overall vitality of these institutions. A positive response to forces that exist both inside and outside the institution is necessary to maintain the vitality needed in the next two decades. The changes in academic offerings that will be necessary are not unlike those brought about in the technical area by the advent of new technology.

Occupational Module

The occupational module encompasses a broad range of programs that respond to what Gilder (1980) identifies as situational, circumstantial needs (individual learning needs that relate to building, occupying, and maintaining an economic niche). They include the common categories of occupational, vocational, technical, and professional learning needs and are directed toward not only the entry-level skills but also the advancing and maintaining skills already acquired.

The rapid expansion of occupational programs in 2-year institutions and their spread into many 4-year institutions is now history. By their selection of these programs, a majority of the students in 2-year postsecondary institutions have identified the educational/training outcomes that they desire, and the adult majority can be expected to reinforce this trend.

Training for job entry has been primarily a 1-year or 2-year youth-oriented activity with the emphasis placed upon well-defined credit programs. As adults grow in numbers and change careers more frequently (five times or more within a lifetime), there is an increased need for program differentiation. Programs must be designed to provide continued support for the young student and, at the same time, permit easy access to discrete educational experiences for adults who are attempting to change careers. Adults may need only the job-specific portion of the training (many will have previous college or industrial training experience). These requirements indicate a modular approach to curriculum design and multiple entry and exit points in individual programs. The modular approach also makes the program more portable for use in business and industry settings.

Overall, the adult majority will generate pressures for more intensive, shorter, and more tightly designed programs. In the areas related to advanced technologies, these objectives will be difficult if not impossible to carry out. In some 2-year institutions, it has been necessary to unofficially expand programming by a quarter or even a third year in order to develop the skill levels required by industry. The pressure for shorter time frames for retraining combined with the need for more extensive programming in high-technology areas will lead to a greater differentiation in programs.

Overall, the adult majority will generate pressures for more intensive, shorter, and more tightly designed programs.

As was indicated in an earlier chapter, the high cost of some of the newer technical programs has also created pressures for regional development and cooperation. These pressures may have a significant impact upon program design and operation. Some of the proposed solutions include mobile labs, instructors that move from one institution to another, the development of programs jointly conducted with business and industry, and the designation of regional technical colleges.

One of the most visible effects of the adult majority on 2-year institutions has been the rapidly growing area of short-term skill training, or training with a duration that is usually less than 9 months. Paulsen (1981) lists five objectives of short-term skill training:

- To enable workers to enter the job market
- To enable workers to advance in their present job
- To enable workers to keep pace with the changing technology in their field
- To meet immediate needs of business and industry for skilled workers
- To respond to State, Federal, and professional licensing or certification requirements

A sixth objective could be to enable workers to train for jobs in different fields.

Short-term skill training is not a new endeavor for 2-year institutions. However, the push for economic development, efforts to address unemployment, concern for displaced workers, a rapidly changing technology, and the growing need to support business, industry, and the military are all creating a significant expansion of these programs. The expansion will create internal competition for institutional resources, and being successful will require a much higher level of involvement by the total institution. As a result, many administrators are taking a closer look at the short-term and long-term impact of a vastly expanded short-term training program. Some of the issues involved include the appropriate use and training of faculty, the contractual relationships that are created, effective contract management, quality control, cost sharing, and so forth. One thing is clear. The creation, design, and operation of short-term training programs differ significantly from similar efforts for traditional credit courses.

In an attempt to give better definition to the parameters involved in conducting successful short-term programs for business and industry, Warmbrod and Faddis (1983) studied the efforts of five community and technical colleges in five States. Based on their detailed review, they identified 21 critical elements and recommendations designed to improve efforts to implement short-term training. The 21 critical elements and recommendations can be loosely organized into 6 categories: leadership, responsibility, faculty and staff, programs, delivery, and support systems. These categories are described as follows:

- **Leadership**—Strong leadership from the president of the institution, and a visible commitment from the top levels of administration throughout college, is necessary for successful business and industry programs. These commitments should be reflected explicitly in the institution's mission statement.
- **Responsibility**—The assignment of the responsibility for business and industry training by the institution to a specific office is critical. The institution must assure industry that it is committed to serving industry's training needs. This includes the necessity to emphasize the benefits available to the company from utilizing institutional services.
- **Faculty**—Technically competent faculty who are capable of teaching adults in an industrial content are needed, and an effective staff development system is necessary to keep this faculty up-to-date. An adequate institutional incentive system that encourages faculty involvement with business and industry is also necessary.
- **Program**—There must be adequate time and money for the development of customized training. The timing and location of courses should be based upon the convenience of the companies and their employees. A determination of the needs should be based upon up-to-

date industry profiles. Effective evaluation and feedback mechanisms are necessary to determine the quality and outcomes of customized courses and should be built into the courses.

- **Delivery**—The institution must be flexible and must be able to provide a "quick response" to identified needs. Excellent communications are necessary both within and outside the institution. Active advisory committees are necessary, and close coordination between institutional personnel is necessary in the planning, execution, and evaluation of the programs.
- **Support Systems**—Those 2-year institutions that are part of a State system have an advantage. By sharing resources with other institutions, they are able to more effectively meet the diverse needs of industry. One of the key elements to meeting those needs is up-to-date equipment. (pp. 197-205)

The list portrays the commitment and flexibility that are necessary for successful short-term programming. It also provides a preview of many of the issues involved in the growing efforts to make the more traditional credit programs attractive to industry.

The issue of quick response has far-ranging implications for institutions in the future. Those surveyed agreed that traditional models of needs analysis would be largely ineffective in an environment of rapid changes. These models were based upon the concept of (1) conducting needs studies, (2) justifying programs, and (3) responding to the needs. Current thinking is that the response model must give way to some type of anticipatory model in which programs are developed in anticipation of needs. There are several justifications for this approach.

Most local governments and local institutions are not able to make reasonably accurate forecasts of occupational needs in their service areas. The problems of accurate forecasting at the local level are tied to the facts that (1) 80 percent of the growth in jobs results from activities of small firms which generally do not have accurate or systematic data; (2) the net employment change in a local area depends upon the expansion, birth, death, and out-migration of firms, and advanced information concerning these factors is extremely limited; and (3) local employers' abilities to forecast accurately is very limited (Bryce 1983).

In addition to the above limitations, the institution is increasingly preparing students for jobs that are available on the regional or National level. The complexity of forecasting by a local institution at that level is increased by the awareness that other independently operating institutions may also be responding to the same training needs.

Institutions must develop improved systems to analyze and project future needs and must have authority at the local level to respond rapidly.

Institutions must (1) develop improved systems to analyze and project future needs and (2) must have authority at the local level to respond rapidly. This may become a critical issue as States centralize more of the decision-making process. Governing agencies must develop creative systems that provide adequate control without significantly reducing local response time.

Yet another issue that can be expected to alter the nature of the occupational module and affect the role of the institution is one associated with the level of job training needed in the future. The high-skill technical programs will require many of the traditional math and science skills, and entry requirements will usually meet or exceed those for the general college population. Therefore, institutions can readily add these programs with only a limited number of changes in philosophy and operational procedures. Obviously, there is an impact related to the acquisition of equipment and technical staff, but these do not generally require major conceptual changes from traditional positions.

At the center of the issue is the need for training for lower-skilled occupations that may not require college-level preparation. The clients do not meet traditional entry-level requirements, and many do not necessarily need traditional academic credit hour courses. New courses and support services have to be devised that differ from traditional patterns. In addition, the students may need only 1 to 6 weeks of training.

Projections by the U.S. Department of Labor indicate that although the rate of growth for high-tech jobs will be high (70-148 percent in computer programming), the total number of new jobs in these areas will be small compared to those created in the broad job base that involve less-skilled activities. In fact, the largest number of jobs will be generated in the low-skilled areas of janitor, nurse's aide, sales clerk, cashier, and waiter/waitress (Levin 1983).

Although there will be little technical training needed for these positions, there will be a need for some type of institutional assistance with job transition and the minimal training required. If institutional goals are oriented toward helping adults change careers, these short-term, low-skill vocational training opportunities are not only acceptable but welcomed. Of course, Federal dollars associated with programs such as CETA and JTPA have already made these types of activities more acceptable to many institutions. Even 4-year traditional liberal arts colleges have been known to seek and obtain contracts for short-term vocational training.

A long-term commitment to clients in low-skill jobs will require a review of the institutional role for many organizations and a reaffirmation from faculty and staff of their commitment to the problem-solving approach. These are definitely not "college-level" training needs, and a traditional higher education approach will be disastrous. Yet, it may take the resources and capabilities available at the postsecondary level to help resolve the complex problems.

Placement

Public educational institutions are not well-known for their outstanding job placement services. Many individual programs have outstanding placement records because the individual instructor assumes the responsibility for placing his or her students, but this level of commitment is seldom evident on an institutionwide basis. The primary reason for this seems to be that most institutions are closely tied to the traditional academic model that gives a low priority to placing students in jobs.

The increasing interest in occupational education and the advent of massive retraining efforts are expected to create a critical need for effective job placement by public institutions. If these internal pressures are not sufficient, the competition from proprietary schools will provide the necessary additional incentive. Most proprietary schools "sell" job placement as their major product. The training is provided to enable the school to place the individual. The better private occupational schools use job placement and job retention as a major indicator of their success. Public 2-year institutions involved in JTPA programs are now signing contracts having performance objectives that include job placement ratios. There is an increasing recognition that successful completion of the contract not only entails the preparation of a qualified technician but also involves the process of developing job-getting and job-retention skills.

Job placement responsibility must become a priority for 2-year institutions in the future. An effective system will involve not only a professional job counselor but also the entire faculty and staff of the institution. It also

Job placement responsibility must become a priority for 2-year institutions in the future.

involves extended efforts to support the individual further as he or she adapts to the new job.

Evaluation and Outcomes

The desired outcomes related to postsecondary occupational training are not universally defined and have long been debated. One side of the debate stresses the need for job-specific training to prepare a worker for production as rapidly as possible. The other side stresses the need for a broadly trained worker who can move from job to job with little retraining. The current concerns can largely be attributed to two factors: (1) the growing use of postsecondary institutions for economic development and (2) the rapidly changing technology. Training for State economic development training is normally designed to be limited and very job-specific. Since the objective is to move workers from the initial training to the production line as rapidly as possible the training is limited to job-specific skills. The advantages of job-specific training can generally be supported until there is a massive work force displacement caused by the introduction of new technology, the closing of a plant, or other such developments. At these times, there are arguments that institutions should have provided more general training to help the workers move easily from one job to another.

Whatever the outcome of the debate, an increased emphasis is being placed upon the identification and measurement of desired outcomes. This increased concern for accountability will require that institutions establish more effective analysis and evaluation of performance. Garbarino (1984) lists six measures that should be included with other institutional statistics:

- The number of students retained throughout the entire full-service process
- The number of student-determined goals achieved
- Academic growth
- Level of skill achievement in vocational skills
- Number of jobs obtained
- Number of jobs retained at 6 months and 12 months

Garbarino concludes by stressing the need to verify cost-effectiveness.

The concern for measuring institutional effectiveness is reflected in the 1983 recommendations of the Commission on Colleges of the Southern Association of Colleges and Schools (1983). The recommendations call for a planning program that includes effective methods of measuring institutional achievements. Educational outcomes were identified as the ultimate measure of institutional achievement. The identified outcomes included "the success of its students in acquiring knowledge, competencies, and skills and learning their meaningful application; in forming desirable attitudes and in gaining values and perspectives; and in developing the capacity for further learning" (p. 14).

The recommendations of the commission specified a requirement for institutions to have a planned program of outcome assessments that is characterized by the following elements:

- The institution has defined its major educational goals and expected outcomes in terms that lend themselves to measurement.

- The institution has defined the "effectiveness indicators" (i.e., the types of evidence and levels of achievement) to be used in determining the achievement of outcomes.

- The institution has established and implemented a systematic outcomes assessment program.

- The institution uses the results of its outcomes assessment in institutional planning and decision making to improve the quality of its programs. (pp. 14-15)

Even though the recommendations were not implemented by the College Delegate Assembly in 1983, they serve as an indication that the broad generalizations of the past concerning institutional effectiveness will not be adequate for the future.

Auxiliary Services

Traditionally, the auxiliary services needed by conventional institutions have been limited, the needs of 18- to 22-year-olds being limited. Most institutions needed no more than a bookstore and a cafeteria to provide for this population. The needs of the adult majority are much more diverse and often will require expanded auxiliary services.

These services will be based upon the principle of assisting the adult in overcoming various obstacles to training. For example, young children may prevent a mother from enrolling in a much needed program. In such cases, child care may be furnished by the institution. In other cases a clothing exchange may be necessary to provide students with appropriate apparel for an interview (Garbarino 1984). Arrangements may also need to be made for tuition alternatives or customized financial support to carry the client through the training process into the new job.

For many traditional educators the services described here are considered beyond the scope of the institution's responsibility. However, if the intended outcome is to educate or train an individual for successful employment, and the services are not available elsewhere, is there an alternative? The agenda for change is described most appropriately by Sussman (1981) when he said, "Remaining adaptable and flexible to accommodate the changing needs of a changing population while avoiding chaos and maintaining standards is our agenda for the future" (p. 2).

Faculty

Faculty* provides the major point of contact between the student and the institution. As a result, the lives of the faculty will probably be affected the most by the arrival of the adult majority and the shifts that are required to support their needs. Faculty members who are subject matter specialists may have to reexamine their material in the light of student needs, and disciplines and departments may be revised to reflect better the interdisciplinary life-related modules (Siegel 1978). Although evening classes have exposed many full-time faculty to the adult majority, the exposure has been limited primarily to participation in standardized activities. Other faculty members have conducted nontraditional adult programs and have experienced the need to modify their approach to the student and to the instructional process. In addition to pressures for change from a changing student body, faculty members are also under a variety of pressures from outside forces such as the rapidly changing technology, the concern for productivity, and decreased opportunities.

Some of the faculty issues directly affecting institutions are (1) program development, (2) community involvement, (3) use of part-time faculty, (4) loss of faculty power within the institution, and (5) professional development for faculty.

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*The term *faculty* in this study includes administrators.

Program Development

"Where faculty expertise, values, and attitudes are incongruent with student needs, institutions may experience enrollment decline and excessive attrition" (Guthrie-Morse 1981, p. 32). The emphasis on meeting the needs of a more diverse group of clients will necessitate extensive new program development. No longer will faculty be able to model their courses closely after the undergraduate or graduate courses that they experienced in their training. As courses become more customized (to the individual, an industry, or the locale), it will also be more difficult to "borrow" someone else's design that has been developed at another institution. Therefore, faculty members will be challenged more than ever to develop original programs to meet specific needs.

Contrary to traditional program development (often limited to an individual instructor or department), many of the new programs needed will be truly interdisciplinary. Therefore, the faculty members will find that they are increasingly involved in a team approach to problem solving, and team problem solving will not be limited to other faculty. As business, industry, and other groups become more involved in the life of the institution, there will be increased collaboration with individuals from the community.

Faculty members will be challenged more than ever to develop original programs to meet specific needs.

As has been indicated earlier, one of the most significant changes in program development will be the need for the development of a career matrix design that will provide "linking" courses that are competency based and are designed to help move an individual from one career to another in the shortest time possible. Program development at this level will require new levels of creativity and faculty expertise.

Community Involvement

Increased community involvement of faculty will be necessary in a number of areas. As was indicated, the program development process can be expected to involve community representatives, and expanded program delivery systems will often require faculty to teach in locations scattered throughout the service area. As competition for students continues to increase, faculty members can be expected to become more active in marketing their own programs and the programs of the institution.

Additional community involvement by faculty will also be necessary in the area of job placement. The emphasis upon occupational programs and their expected outcomes will place increased responsibility upon faculty to help place their students. Lastly, many instructors will seek the support of business and industry to enable them to work in their field for a period of time in order to maintain their skills in areas of rapidly changing technology.

These observations are not limited to the faculty members who are primarily responsible for occupational training. The need for many of the programs to be interdisciplinary will necessitate the involvement of science and humanities faculty in both program design and delivery.

Part-time Faculty

The growing use of part-time faculty is becoming one of the most critical issues in 2-year institutions in the eighties and nineties. The participants in this study almost universally agreed that the current methodology for management of part-time faculty is inadequate and must be improved significantly. The critical nature of this issue is evident when considering such facts as part-timers made up 55.8 percent of community college instructional staff in 1976. Reduced funding levels, more adult students, and the demand for more nontraditional programs are expected to cause further increases (Miller 1982). Yet, in spite of the importance of part-time faculty, there is generally inadequate orientation, instructional support, professional development, or involvement in institutional decision making.

In a 1977 study involving 9 states, Black (1981) found that 87.8 percent of the part-time faculty, 97.1 percent of department chairs, and 100 percent of the deans or directors of continuing education indicated that part-timers needed additional assistance or information in areas related to instruction. Over 60 percent of those surveyed indicated that part-time faculty needed assistance in each of the following areas: evaluation, philosophy, student relations, teaching techniques, and miscellaneous (paper work, media, and so forth).

The primary reasons given for the use of part-time faculty include the need (1) to obtain highly specialized technical skills (often available only in business and industry), (2) to obtain clinical or lab facilities, (3) to obtain the flexibility of more closely matching personnel to student enrollment, and (4) to balance the budget by the use of inexpensive part-time instructional staff. Secondary benefits are also important in that the use of part-time faculty instead of tenured faculty provides more flexibility for the future.

Although there are numerous issues involved in the extensive use of part-time faculty, the most critical issue appears to be the concern for quality control. The traditional approach to the use of part-time faculty has been to find the most qualified individual available, hand them the class rolls, push them into the classroom, and perhaps pray. This approach is not too surprising in that it differs little from the approach used in higher education with new full-time faculty. The difference is that successful full-time faculty members have a much higher visibility and eventually, by association and, it is hoped, effective inservice training, learn positive instructional norms and procedures.

Part-time faculty who have extended assignments with the same institution eventually have sufficient contact with administrators and other faculty to acquire an understanding of instructional norms and procedures. But, the rapid turnover of part-time staff and the inconsistent and periodic use of other part-timers tend to support the assumption that a large number of the students are being taught by individuals who have little connection with, or understanding of, the institution.

In the extensive use of part-time faculty, the most critical issue appears to be the concern for quality control.

One defense that is often put forward is that some of the part-timers are better than some of the full-time faculty. Unfortunately, the observation is not a positive one for the institution as a whole. Other issues related to the part-time faculty problem include the financial exploitation of part-timers, the lack of effective management strategies, the lack of representation in decision making, failure to evaluate, and the loss of support for necessary committee work and student advising.

Administrators must soon address the issues involved in the use of part-time faculty. Since it is evident that they are a permanent part of 2-year institutions, efforts must be made to ensure that they develop a professional relationship with the institution and its students. This requires a review of recruiting practices, orientation practices, pay levels, and evaluation practices. It also requires the establishment of brief, intensified instructional methods workshops to ensure that the individual's technical expertise can be adequately communicated to students.

To delay efforts in this area unnecessarily jeopardizes quality control at a time when the quality of the educational system is already in question. Since this is an area that is almost completely within the purview of the institution, it will be easier to address than some of the other issues.

Power

Traditional power relationships are changing in 2-year institutions. Some of the reasons for the changes are (1) the increasing centralization of decision making at the State level, (2) the move to increased cooperation with outside agencies such as business and industry, and (3) the increasing number of part-time faculty members who are not generally included in the decision-making system of the institution. Overall, these trends may create a long-term decrease in institutional autonomy.

For some, this issue will present major problems (especially where unions are involved). For others, it may be recognized as a continuing evolution fueled by changing economic patterns and changing societal needs.

In either case, faculty must be prepared to have others involved in areas that were once protected (areas such as program definition, program development, and program evaluation). In addition, administrative options will also be reduced, and decisions may take longer and be more standardized.

The hope is that creative governance can moderate these trends and maintain operational freedom at the local level. For this to occur, postsecondary educators must be prepared to present strong positions that are based upon concepts extending beyond the self-interests of the local institution or program.

Professional Development

Aging of the faculty and rapidly changing technology are presenting institutions with the prospect that they will be faced with an obsolete teaching corps in a few years. This trend toward obsolescence is intensified by reduced mobility, which prevents older faculty from moving to new jobs and younger faculty with the latest knowledge and skills from entering the institution. Institutions with many tenured faculty members find that their options are reduced, and their ability to respond to new demands is significantly impaired.

Faculty members in some traditional programs are finding that with decreasing enrollment in their programs, their jobs are no longer secure. This is leading to a review of the concept that they hold a "terminal" degree. Both administration and faculty must recognize that massive updating and retraining efforts for faculty will be necessary to maintain institutional integrity, and such efforts must be established as a permanent part of the inservice system.

Massive updating and retraining efforts for faculty will be necessary to maintain institutional integrity.

This need of extensive faculty development comes at a time when the effectiveness of the primary faculty training institutions (the universities) is in question. In an interview published in *Industrial Education*, Adamsky ("Industrial Education Interview" 1983) indicates, "It is virtually impossible to produce technically competent industrial vocational teachers in the institutional setting of a college or university. Technical experience and competence are better developed in the actual world of work" (p. 9). This position was supported in part by one of the State leaders who was interviewed during this study. The State department had contracted with a State university to provide update training for faculty, and the results had been largely unsuccessful. An alternative under consideration was a teacher-training academy operated by the State department that would be designed to upgrade and update the postsecondary vocational instructional staff of the State. The major issue seems to be identifying who can and will provide the training needed to keep faculty current and effective.

Institutions must review their staff development goals in light of the changes that are taking place in the institution and the society. Smith (1981) makes the following recommendations:

1. Goals for community college staff development programs be set so as to reflect the total needs of each group of employees represented in the college.

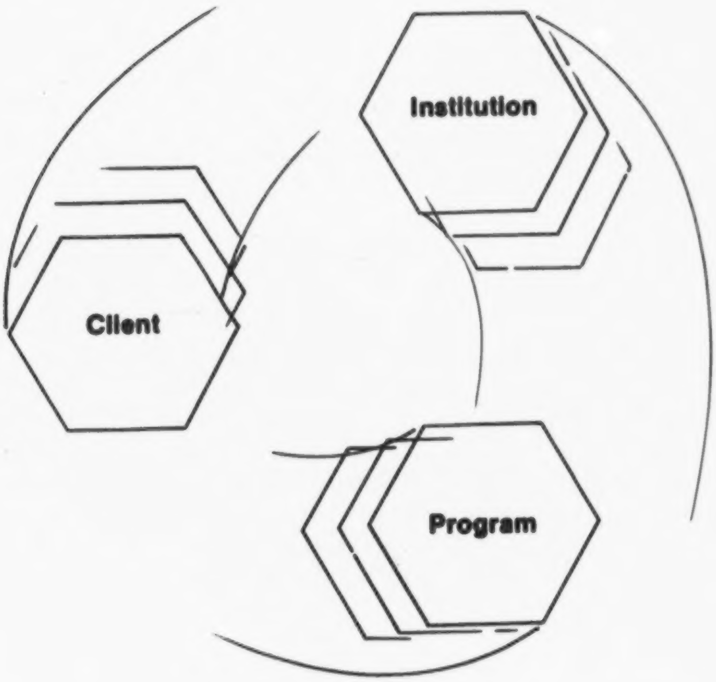
2. The goals for community college staff development programs be limited in the future so that maximum program impact can be achieved in any given year.

3. Greater emphasis be placed on meeting development goals related to the needs of non-full-time teaching faculty, particularly part-time faculty and non-academic support staff.

4. Greater emphasis be given to development goals designed to help staff members prepare for future roles as opposed to present job responsibilities.

5. Development goals for staff development programs should include specific criteria for the evaluation of goal achievement. (p. 57)

Governing agencies and funding agencies must realize that increased staff development is a "cost of doing business" in the future, and that adequate funds must be allocated.



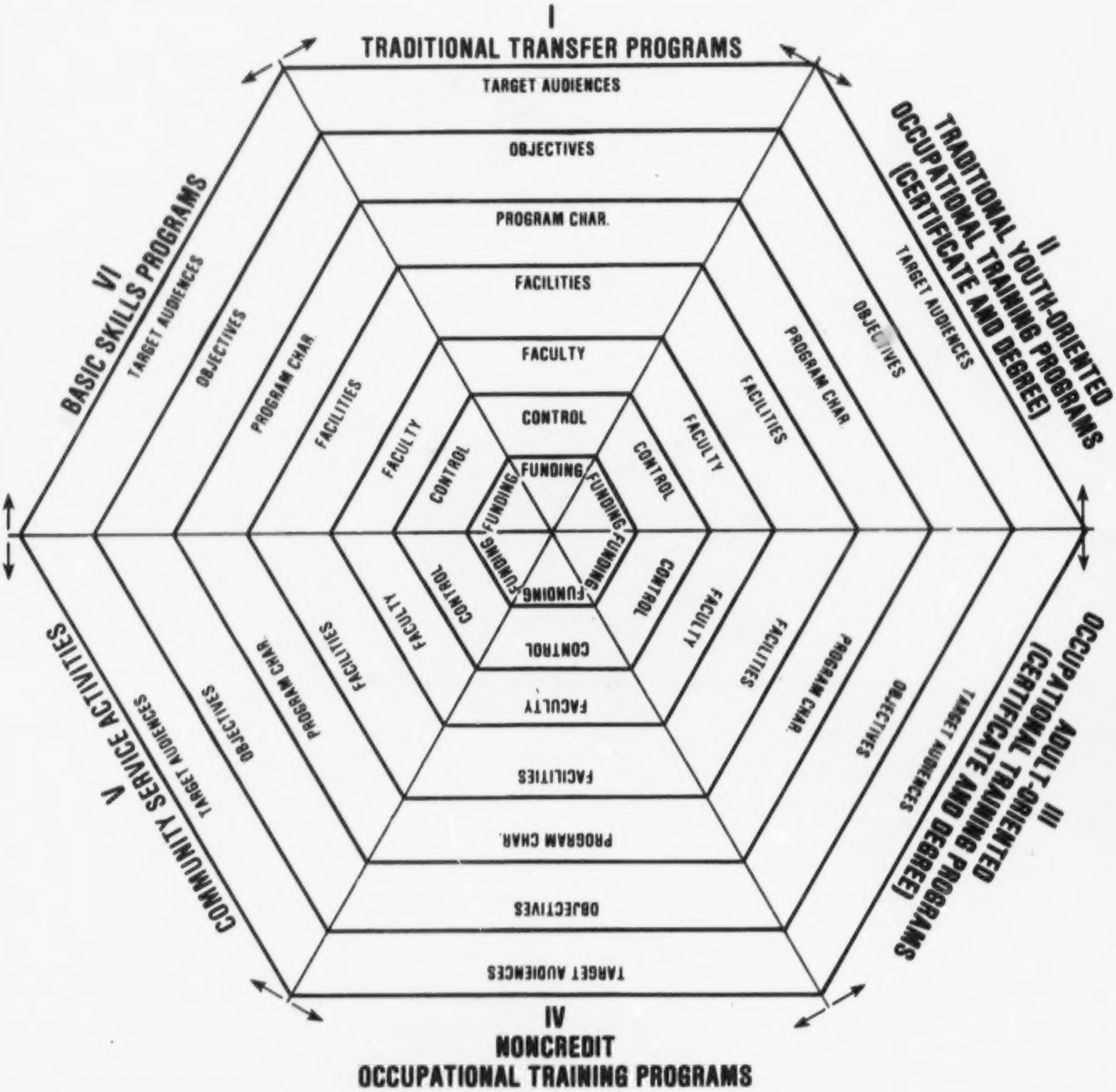
CHAPTER VI

IMPLICATIONS FOR INSTITUTIONAL CHANGE

Diverse institutions responding to rapid change seldom have clearly defined objectives or uniform directions. The broad issues involving change identified in this study also have these attributes. The issues discussed are not necessarily independent from one another, and their impact on a given institution in a given State is not clear. Therefore, attempting to anticipate the specific impact of these changes upon a widely divergent group of 2-year postsecondary institutions would be folly. Yet, there are a number of excellent resources available that provide valuable insights concerning the future of 2-year institutions. These include publications by Cohen and Brawer (1982) and Breneman and Nelson (1981) and the New Directions for Community Colleges series sponsored by the ERIC Clearinghouse for junior colleges and published by Jossey-Bass.

A pragmatic approach to change at the institutional level must include the flexibility for an individual institutional analysis. Figure 4 is a model designed to provide the basis for discussion of change in an institution. Its intended use involves the movement of the lines dividing the major program areas so that the size of the different areas represents the level of commitment to a given program that is projected by institutional planners. Possible changes in institutional commitment are portrayed by the series of diagrams at the bottom of the figure. Once the model is redesigned to fit an institution, analysis concerning the nature of the various institutional components can begin.

Six programs were chosen to represent the major programming areas of most 2-year institutions. These are traditional transfer


I
TRADITIONAL TRANSFER PROGRAMS
II
TRADITIONAL YOUTH-ORIENTED OCCUPATIONAL TRAINING PROGRAMS (CERTIFICATE AND DEGREE)
III
OCCUPATIONAL ADULT-ORIENTED (CERTIFICATE AND DEGREE) OCCUPATIONAL TRAINING PROGRAMS
IV
NONCREDIT
OCCUPATIONAL TRAINING PROGRAMS
V
COMMUNITY SERVICE ACTIVITIES
VI
BASIC SKILLS PROGRAMS
TARGET AUDIENCES
OBJECTIVES
PROGRAM CHAR.
FACILITIES
FACULTY
CONTROL
FUNDING

Charts portray the anticipated direction of change, not magnitude.

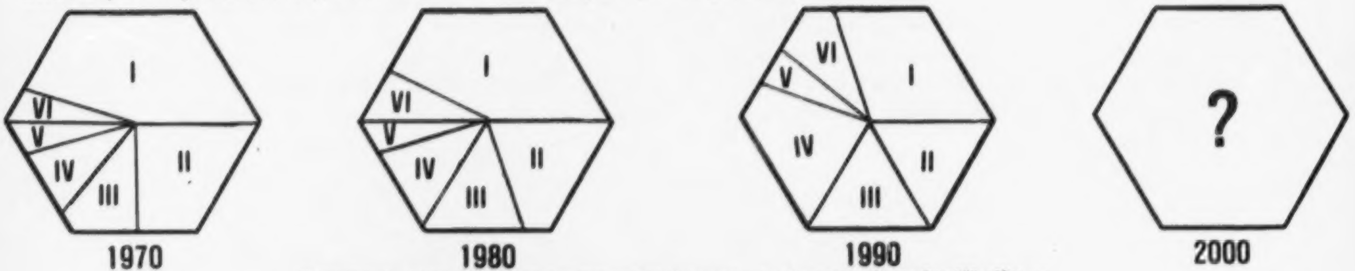


Figure 4. Changing programs in 2-year postsecondary institutions

programs (I), youth-oriented occupational training programs (II), adult-oriented occupational training programs (III), noncredit occupational training programs (IV), community service programs (V) and basic skills programs (VI). Areas I, IV, and V are generally accepted and understood classifications. There are a number of terms used to describe basic skills (VI). In this model the term is intended to represent all of the programs that are identified as basic skills, developmental studies, remedial studies, and so forth. Normally, areas II and III are not discrete. Older adults are trained in the same classes as the 18- to 22-year-olds. Yet, there are programs such as those conducted in industrial locations that have been modified to respond more appropriately to adult needs. A discussion of areas II and III as discrete entities is intended to help identify the changes that may take place.

Additions could be made to the program components that were selected: target audiences, objectives, program characteristics, facilities, faculty, control, and funding. The number of components was limited for this model in order to keep the model relatively simple. Institutional planners may wish to add, subtract, or substitute other elements.

The following analysis by area is intended to reflect the factors of change identified in this publication. The major objective is to provide a structure for informed discussion. Therefore, those who disagree with some, or all, of the conclusions are heartily welcomed to the debate.

I. Traditional Transfer Programs

- **Target Audiences**—The clientele in these programs will be individuals who fall primarily in the 18- to 22-year-old bracket. The combination of the decrease in high school graduates due to the smaller age cohort and the increased competition for graduates by universities, business, industry, and the military can be expected to reduce the size of this clientele significantly.

- **Objectives**—The objectives of the programs are to provide individuals with credit courses that make up the first 2 years of a 4-year degree.

- **Program Characteristics**—The programs are linear in design and are standardized based upon the requirements of the 4-year institutions that accept the credit from the 2-year institution.

- **Facilities**—The programs are conducted primarily in campus facilities, although there is a growing effort to offer individual courses off campus using electronic media or selected off-campus sites.

- **Faculty**—Faculty members are trained in traditional academic programs and attempt to reproduce those programs faithfully. Faculty are largely full-time, although there seems to be an increasing use of part-time faculty in this area.

- **Control**—Control is usually centralized at the State level or is strongly influenced by the institutions accepting the credits.

- **Funding**—Funding is usually a mixture of funds from the basic institutional budget (State and local funds) and the individual. A large majority of the individuals work and/or receive student aid.

II. Traditional Youth-Oriented Occupational Training Programs (Certificates and Degree)

- **Target Audiences**—Clientele in these programs will be in the 18- to 22-year-old bracket. The combination of the decrease in this age cohort and the increased competition from business, industry, and the military can be expected to decrease the size of this audience significantly. Decreased vocational opportunities at the high school level (caused by increased academic requirements) may moderate the decline as more of this group seeks postsecondary vocational training to replace vocational training at the secondary level.

- **Objectives**—The objectives of these programs are to provide the skill training necessary to obtain entry-level employment. The pacing and design of courses provide opportunities for the development of maturity and some socialization skills.

- **Program Characteristics**—Programs are linear in design and time constant. They may last from 9 months to 3 years. They also are relatively standard in that they seek to provide a broad base of training in the basics of a career field. Local input may be encouraged, but the need to provide a broad subject coverage limits the range of variation in the program content. In addition, there are program evaluations conducted by the State or other agencies that test basic standards that must be met by each program.

- **Facilities**—The programs are conducted primarily at campus facilities. The requirements for expensive laboratories and equipment somewhat limit the portability of these programs.

- **Faculty**—Faculty members are trained in career programs at the college or by industry. The capability for original program development is most desirable, but there are numerous model programs that have been developed that are often adapted for local use. Faculty are largely full-time.

- **Control**—Control is somewhat centralized at the State level or in some cases it rests with a professional accrediting agency. There is usually more freedom for variation in these programs than exists in the transfer programs.

- **Funding**—Funding is usually a mixture of funds from the basic institutional budget (Federal, State and local) and the individual. A majority of the individuals work and/or receive student aid.

III. Adult-Oriented Occupational Training Programs (Certificate and Degree)

- **Target Audiences**—Clientele for these programs will be predominately individual adults. However, there is an increasing use of these programs by business, industry, and other organizations to train their employees. The Government also uses these programs to support some JTPA training. Total numbers of students are expected to increase.

- **Objectives**—The objectives of these programs are to provide the skill training necessary to move adults from one field to another or to upgrade adults who are already working in the field.

- **Program Characteristics**—Programs are modular in design and time variable. They provide for "fast-tracking" (rapid movement past competencies already developed in other ways). The programs are relatively standardized (although less standardized than those for youth), and must provide a broad base of instruction. They are subject to review by outside agencies. Increasingly, the programs must be redesigned to provide linkages between careers (as was described by the training matrix in a previous chapter). Local input will have more impact, because in many cases local organizations are paying the tuition.

- **Facilities**—The programs are conducted primarily at campus facilities. The requirements for expensive equipment and laboratories limit the probability of the programs. However, where possible, there is an increasing trend to offer portions of the programs in the facilities of organizations that contract for a class or an entire program. This is especially true for programs offered at military bases.

- **Faculty**—Faculty members are trained in career programs in colleges or by industry. The capability for original program development is most desirable, but the ability to modify programs to fit the needs of adults better is a necessity. The traditional program models must be modified to provide for career transition. The composition of the faculty consists of a few full-time faculty and a large number of part-time faculty who work in the field. A basic understanding of adult learning concepts is necessary.

- **Control**—Control is somewhat centralized at the State level, or in some cases it rests with a professional accrediting agency. Local input can be detected in some of the programming.

- **Funding**—Funding is usually a mixture of funds from the basic institutional budget (Federal, State, and local) and the individual or the organization for which he or she works. Some funding is available from JTPA and other Federal programs. Almost all of the students work, except for government-funded students.

IV. **Noncredit Occupational Training Programs**

- **Target Audiences**—The target audience is adults with extremely diverse backgrounds. Some attend because of individual initiative, others are sent by their organization, others are enrolled through Government programs, and others are being trained for new and expanding industry. A significant growth in the numbers of students in these programs is expected.

- **Objectives**—The objectives of the program are to provide training that addresses the job-specific needs of individuals and/or the organizations that send the individuals. The training may be directed toward retraining for a new field, job reentry, job upgrading, or job updating.

- **Program Characteristics**—Programs are extremely modular and very time variable. They are often customized to deal with a specific skill or set of skills, or a specific need of an organization. The optimum design provides linkages between fields and between various levels within fields. Local input is a necessity, and it plays a major part in program development.

- **Facilities**—The programs are conducted both on and off campus.

Changes in the next 2 decades will require 2-year institutions to offer:

- ***Traditional transfer programs***
- ***Traditional youth-oriented occupational training***
- ***Adult-oriented occupational training***
- ***Noncredit occupational training***
- ***Community service activities***
- ***Basic skills programs***

- **Faculty**—Most of the faculty members are recruited from industry on a part-time basis. They must have excellent program development skills because the need to customize limits the use of model programs. An understanding of adult learning concepts is required.

- **Control**—The control of these programs resides primarily at the local level. This varies to some extent from State to State based upon the level of State funding involved. Local control is necessary to provide the short response time and local customizing that are needed. The trend toward centralized decision making presents a very real problem for these programs.

- **Funding**—The funding for these programs is extremely diverse. There is a wide variation in support from State to State and within the types of programs in a State. For example, economic development programs are generously funded in a large number of States, whereas programs for the individual to retrain, upgrade, or update may receive little or no support in some States. Government programs such as JTPA are also a significant source of funding.

V. **Community Service Activities**

- **Target Audience**—The target audience is made up of all elements of the community. Although the need to provide more services may exist, funding is not generally available for significant growth in this area.

- **Objectives**—The major objective of these programs is to provide educational/training programs and services to improve the quality of life for the individual and for the community as a whole. These programs vary from those concerning community issues to those that improve the quality of an individual's leisure time and other non-job-related activities.

- **Program Characteristics**—Programs are extremely diverse and are usually of short duration.

- **Facilities**—The programs are conducted both on and off campus.

- **Faculty**—Most of the faculty members are recruited from the community. Their formal preparation is extremely diverse.

- **Control**—Control resides at the local level.

- **Funding**—Most activities are self-supporting. There may be some public funding, but it is limited and is not expected to increase significantly.

VI. **Basic Skills Programs**

- **Target Audience**—The target audience is made up of adults and youths who have an academic deficiency(ies) that would prevent their successful completion of either credit or noncredit programs. The return of an increasing number of older adults is expected to create a greater need for these programs. Improved academic preparation at the secondary level may partially offset this trend, but the impact is probably several years away.

- **Objectives**—The objectives of the programs are to remedy the academic deficiency so the student may proceed to his or her desired education/training objective.

- **Program Characteristics**—Programs are extremely modular and very time variable. They include extensive student assessment and may be modified to address individual needs that range from reviewing forgotten skills to adding new skills.

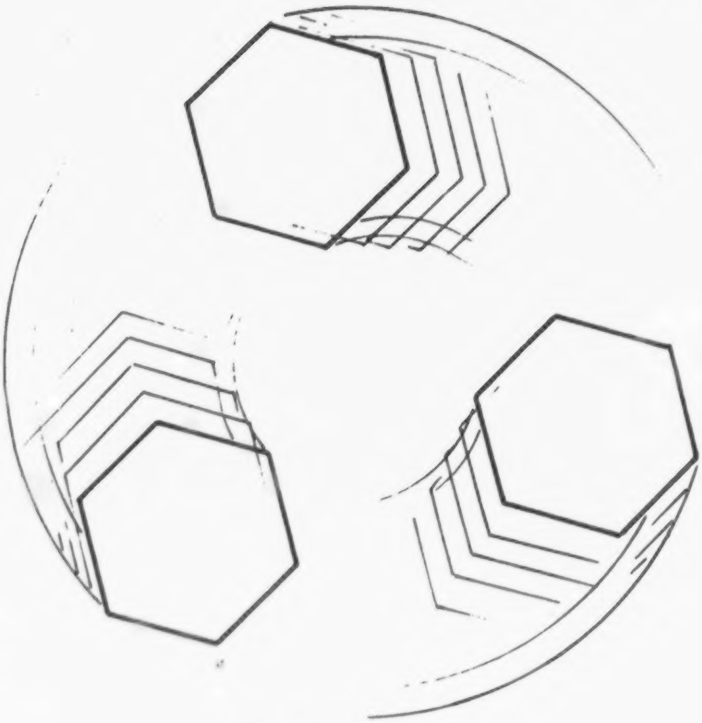
- **Facilities**—The programs are conducted primarily on campus, but are portable.

- **Faculty**—Faculty members are generally college trained. There is usually a mixture of full-time and part-time faculty, and instructional aides are not uncommon.

- **Control**—The control resides in the local institution.

- **Funding**—The funding is a mixture of funds from the basic institutional budget (State and local) and the individual.

As changes in the model over the next two decades are examined, it is generally agreed that the majority of students served by 2-year institutions will be adult, and they will be participating in programs that will require increased flexibility, increased local control, different funding strategies, and different faculty competencies. Each institution must address these needs, and governing boards and agencies must develop systems that can adequately respond to the new educational environment.



CHAPTER VII

SUMMARY OF ISSUES AND TRENDS

More than in the past, educational leaders will influence the future of their institutions by the choices that they make. And choose they must. In an era when technological, economic, political, and social changes continue to accelerate, leaders must respond to increasingly strong external and internal stimuli that demand attention and analysis. They must choose between alternative scenarios for the development of the institution in response to these stimuli, and they must choose how the limited human, physical, and financial resources of the college must be development and allocated (Myran 1983, pp. 18-19).

Many of the choices to which Myran refers will be related to the new adult majority and their unique needs. This study has identified some of the issues that may be involved as choices are made and the related trends that appear to be developing. The issues and trends that were identified are summarized as follows:

- **General Issues and Trends**
    - — Increased competition in the educational marketplace, and continued public funding of alternative delivery systems
    - — A leadership void at the National level that is representative of all postsecondary occupational training
- **Client-related Issues and Trends**
    - — Decrease in 18- to 22-year-old cohort and increased competition for those available
    - — More heterogeneous student bodies

- A new client mix (a greater number of older adults, organizations, and Governments as clients)
- New relationships with organizations as clients
- Clients who will be more powerful, individually and as a group

- **Institution-related Issues and Trends**
  - Growing differences between the urban and rural institutional missions
  - Increased centralization of decision making to the State level
  - Increased demand for accountability
  - Increased regionalization of programs and activities
  - Inadequacy of FTE funding to support new client needs
  - Increasing competition for funds at the State level
  - A growing debate concerning who should pay for programs designed to meet nontraditional needs

- **Program-related Issues and Trends**
  - New program objectives to address the need to move the individual from one career to another
  - Proactive programs rather than reactive programs
  - A growing need for effective lifelong learning systems
  - Improved assessment processes
  - A growing debate concerning job-specific training as opposed to general education
  - A debate over who will provide basic skill instruction for adults
  - Failure of traditional needs analysis efforts and need for a system of needs anticipation
  - Effect that deskilling the work force has on program selection and design
  - The identification of who will provide training for low-skilled positions
  - An increasing need for improved job placement by public postsecondary institutions

Some of the issues and trends developing for 2-year institution decision makers include:

- ***Competition***
- ***Leadership***
- ***A new client mix***
- ***Lifelong learning systems***
- ***Job placement***

APPENDIX

EDUCATIONAL LEADERS INTERVIEWED

Alabama

Col. Rodney Cox, Jr., President
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